1976

Oil Pollution on Lake Superior: The Uses of State Regulation

A. Dan Tarlock
Indiana University School of Law

Oil Pollution on Lake Superior: The Uses of State Regulation

A. Dan Tarlock*

TABLE OF CONTENTS

I. INTRODUCTION

Lake Superior is the purest of the Great Lakes,[1] and its ecosystem the most fragile. The lake remains very cold most of the year, and, because little water enters through tributary streams, flushes slowly. As Lake Superior contains little organic matter to serve as a substrata for bacterial growth, organic contaminants introduced into the lake decompose very slowly. At present, Lake Superior is a delicately balanced oligotrophic ecosystem which is vulnerable to disruption by introduction of significant amounts of foreign substances.[2]

The lake is not only a natural resource of great beauty but a major transportation artery as well. Commodity transportation on the lake provides, at potential cost to future generations of lake users, substantial economic benefits to the Upper Midwest and Canada. Since the three major bulk commodities shipped across the lake—iron ore and concentrates, coal, and grain[3]—are environmentally benign, the current costs of commodity transportation do not generally include foregone opportunities for such uses as fishing and shoreline recreation. Because ore is relatively inert "a spill of this material will have relatively little effect on the lake, even in the local area of the spill."[4] Grain, which

---

* Professor of Law, Indiana University, Bloomington. A.B. 1962, LL.B. 1965 Stanford University. This article is a revision of a paper commissioned by the Minnesota Pollution Control Agency for a conference entitled, Lake Superior—A Resource Imperiled, sponsored by the state of Minnesota in cooperation with the states of Michigan and Wisconsin and the Province of Ontario held in Duluth, Minnesota in March of 1976. The opinions expressed in this article are solely the author's and do not in any way reflect the policy of the Minnesota Pollution Control Agency.

1. J. NAPOLI, THE COASTS OF WISCONSIN 6 (1975).

2. This description of the ecosystem of Lake Superior is taken from Mount, Vick & Christensen, Potential Damage from Toxic Substances in Lake Superior (unpublished paper prepared for the Minnesota Pollution Control Agency Conference, Lake Superior—A Resource Imperiled, March 1976, Duluth, Minnesota, on file at MINNESOTA LAW REVIEW). The risk of damage to the ecosystem of Lake Superior is aggravated because a spill of contaminants is more likely to occur near shore, the most biologically productive area.

3. In 1973, iron ore and concentrates, coal, and petroleum products accounted for 66.4 percent of all commodities shipped across the Lake, and the total tonnage of these commodities was 77.7 million tons. Oil comprised by far the smallest percentage of these three commodities, representing 0.6 percent of the United States total and 3.2 percent of the Canadian total of commodities shipped. The remaining tonnage, 39.4 million tons, consisted primarily of grain. Sievwright, Strategic Superior, 3-4 (unpublished paper prepared for Minnesota Pollution Control Agency Conference, *supra* note 2, on file at MINNESOTA LAW REVIEW).

4. Mount, Vick & Christensen, *supra* note 2, at 26.

decomposes rapidly through bacterial action, also would have only a minor local effect.

The ecology of the lake may, however, be significantly threatened by another pollutant—oil. Although only small amounts of oil are now shipped across the lake, and projections to the year 1985 indicate that the current *mix* of commodities will remain constant,[5] an absolute increase in the volume of oil shipped will subject the fragile ecology of Lake Superior to a correspondingly increased risk of damage from oil discharges.[6]

Oil may be discharged into waterways and on land both intentionally and accidentally. A tanker discharges oil intentionally when it unloads a cargo, fills the cargo tanks with water to provide ballast for the return voyage, and discharges the oily ballast before taking on a new cargo. Because at present only five oil tankers ply Lake Superior, however, oil which comes from ship machinery and accumulates in the bilges of all vessels is a more likely source of intentional discharge. Accidental discharges occur when a ship goes aground or when a marine disaster, such as hull damage from the pressure of the sea, occurs.[7] Improperly constructed and maintained storage facilities and pipelines or human error during the ship-to-shore transfer of oil are causes of other, less spectacular, accidental discharges.

---

5. "Petroleum products, the smallest single category itemized here, could double to 4 million tons, but this would still be only 2% of the total volume shipped." Sievwright, *supra* note 3, at 14.

6. In general terms, "oil has a low toxicity to marine life. . . . [but] [h]ydrocarbons may harm the viability of marine life without being directly poisonous. The breakdown of oil in the water by bacteria can deplete the dissolved oxygen supply on which marine life depends. Hydrocarbons can enter marine food webs and build up within them just as pesticides do." Report of the Secretary General, *Prevention and Control of Marine Pollution*, U.N. Doc. E/5003, at 29 (1971). To date, documented evidence of the long term effects of massive crude oil spills is lacking. According to a 1975 National Academy of Sciences Report, research indicates that

> [t]he most damaging, indisputable adverse effects of petroleum are the oiling and tarring of beaches, the endangering of seabird species, and the modification of benthic communities along polluted coastlines where petroleum is heavily incorporated in the sediments. . . . Studies to date indicate that areas polluted with petroleum hydrocarbons "recover" within weeks or years; . . . however, composition of the local biologic communities may be altered.

NATIONAL ACADEMY OF SCIENCES, PETROLEUM IN THE MARINE ENVIRONMENT 106-07 (1975).

7. See *Hearings on S. 333 Before the National Ocean Policy Study of the Senate Comm. on Commerce*, 94th Cong., 1st Sess. (1975), for case studies of major spills to 1975. See N. MOSTERT, SUPERSHIP 74-78, 189

The proposed construction of a tank farm at Superior, Wisconsin, to store oil transported from Alberta by pipeline,[8] highlights the need for the states bordering Lake Superior to survey the field of possible regulatory strategies and determine the course they will pursue in order to handle the increased risk of contaminating discharges. Decisions about a state spill strategy for Lake Superior, as well as the other Great Lakes, must take into account complicated legal and economic factors. Since much oil imported into the United States is carried on ships registered in foreign countries, many of them LVCC's (supertankers), prevention of spills involves regulation of international shipping, a field in which spectacular accidents, such as the Torrey Canyon spill,[9] recently have spurred international and national efforts to prevent spills and compensate injured parties. Because prevention of tanker discharges depends on the cooperation of other nations, the United States in most instances works through international standard-setting bodies to promote uniform transportation practices and ship designs and does not exercise its full power under international law unilaterally to regulate tankers entering territorial waters.[10] Moreover, imposition of stricter standards by the United States alone would impair the competitive position

---

(1974), for a discussion of the commercial pressures that resulted in the construction and use of supertankers before the effects of ocean pressures on their hulls were sufficiently known.

8. The proposed storage facility and shipping terminal is to be built by Lakehead Pipe Line Co., a subsidiary of Inter-provincial Pipe Line Co., of Edmonton, Alberta, the operator of the largest crude oil pipeline system in the western hemisphere. The facilities would increase the tonnage of petroleum products handled at the Duluth-Superior harbor by 270 percent. It is estimated that in the first year of operation of the Lakehead facility, Duluth-Superior would move from ninth to third among Great Lakes ports, behind only Chicago and Indiana Harbor, in the shipment of petroleum products. Minnesota Pollution Control Agency Office Memorandum (May 14, 1976) (on file at MINNESOTA LAW REVIEW).

9. In March, 1967 the tanker Torrey Canyon, with 119,328 tons of crude oil aboard, ran aground off the southwest coast of England. During the week before the stranded vessel was bombed and sunk, approximately 60,000 tons of crude oil were released into the sea, causing a reported $18,000,000 in damage to the British coastline. McGurren, *The Externalities of a Torrey Canyon Situation: An Impetus for Change in Legislation*, 11 NAT. RES. J. 349 (1971).

10. Absent treaty restrictions, the United States can impose unilateral design and operating standards on ships entering our territorial waters and close our ports to non-conforming ships. M. MCDOUGAL & W. BURKE, THE PUBLIC ORDER OF THE OCEANS 99-100 (1962). Less established is the power to exclude vessels that are merely passing through our waters. A coastal state's interest in environmental protection might yield to the customary "right of innocent passage." Under the Convention on the Territorial Sea and the Contiguous Zone, April 28, 1958, [1964] 15 U.S.T. 1606, T.I.A.S. No. 5639, ships of all states are given "the

of the merchant marine fleet.[11] Thus, United States statutes and regulations which deal with problems in oil pollution control are designed to conform as closely as possible to international rules.

In order to set the stage for an analysis of and some conclusions about the role of state law within this mesh of national and international authority, the first sections of this Article describe the most important international agreements and federal laws which deal with the problem of oil pollution, noting, where relevant, their particular effect on Great Lakes traffic.

The final section of this Article analyzes the various strategies the littoral states may pursue in developing programs to deal with marine oil pollution. This includes a discussion of the theoretical basis of a state's power to protect its natural resources; the utility of general water pollution legislation in dealing with oil contamination, the feasibility of enacting state spill prevention and recovery legislation, and the constitutional limitations that may affect such legislation; the alternative possibility of controlling oil pollution by prohibitions on access to state ports or waters; and the role of land use controls in pollution prevention schemes. Although the focus of this discussion is on Lake Superior, most of the strategies discussed could, of course, be used by any of the Great Lakes states, and several issues, such as the constitutional limits of state power in preventing oil pollution of navigable waters, are relevant to the coastal states as well.

II. INTERNATIONAL REGULATION OF MARINE POLLUTION

International marine pollution efforts, which are designed to protect both coastal nations and the high seas, are both direct

---

right of innocent passage through the territorial sea." An innocent passage is defined as one not prejudicial to "the peace, good order or security of the coastal state." The Convention thus balances the traditional claim of freedom of navigation with the interests of coastal states in protecting their coastal resources. See M. McDOUGAL & W. BURKE, *supra*, at 174-304, for a discussion of the factors relevant to determining the extent of a coastal state's power to control vessels passing through its territorial waters. For an argument that passage by foreign vessels which threatens environmental harm is not innocent, see R. Bilder, The Role of Unilateral State Action in Preventing Environmental Injury 12-13 (unpublished paper, University of Wisconsin, Grant College Program, 1973). *See also* Kiselev, *The Freedom of Navigation and the Problem of Pollution of the Marine Environment*, 6 GA. J. INT'L & COMP. L. 93 (1976).

11. *See* National Petroleum Council, *Protection of the Marine Environment*, 8 NAT. RES. LAW. 511 (1975).

and indirect.[12] Public international agreements, for example, directly set standards for the design and operation of vessels. By establishing compensation schemes for damage victims, they also indirectly provide tanker operators with an incentive to take spill prevention measures.

The major international standard-setting body is the International Maritime Consultative Organization (IMCO), an arm of the United Nations. National delegations are composed of both public officials and private citizens representing various interests.[13] Since 1954, IMCO has adopted a series of progressively stricter conventions for the prevention of marine pollution. The 1973 International Convention for the Prevention of Pollution from Ships[14] is the strongest of the international conventions adopted to date. This complex document, not yet ratified by the United States, represents the first international effort to regulate pollution caused by noxious substances in addition to oil and to

---

12. *See* AMERICAN SOCIETY OF INT'L LAW: WORKING GROUP ON THE ENVIRONMENT, WHO PROTECTS THE OCEAN? (J. Hargrove ed. 1975).

13. *See generally* Silverstein, *Technological Politics and Maritime Affairs—Comparative Participation in the Intergovernmental Maritime Consultative Organization*, 7 J. MARITIME L. & COM. 367 (1976).

14. *Done* Nov. 2, 1973, *reprinted in* 12 INT'L LEGAL MATERIALS 1319 [hereinafter cited as 1973 Convention]. After the Torrey Canyon disaster, tanker owners entered into a voluntary agreement assuming liability for up to $100 per gross registered ton or $10,000,000 per vessel per incident, whichever is less. TOVALOP (Tanker Owner's Voluntary Agreement Concerning Liability For Oil Pollution), *reprinted in* 8 INT'L LEGAL MATERIALS 497 (1969), provides only for payments to national governments for negligent spills. In 1971, a supplemental agreement was signed. CRISTAL (Contract Regarding an Interim Supplement To Tanker Liability For Oil Pollution), *reprinted in* 2 J. MARITIME L. & COM. 705 (1971), requires TOVALOP-participating oil cargo owners, as opposed to tanker owners, to assume pro rata shares of oil pollution damage to governments and private parties for injuries to land and structural improvements up to $30,000,000 per incident. The two agreements are analyzed and compared to the two IMCO conventions in Becker, *A Short Cruise on the Good Ships TOVALOP and CRISTAL*, 5 J. MARITIME L. & COM. 609 (1974). The IMCO Convention modified TOVALOP by increasing the liability limits and substituting strict liability for negligence. Another Convention proposed the establishment of an international fund to indemnify tanker owners subject to liability and to compensate governments and private parties for damages for which a tanker owner would not be liable or which exceeded the limits of the owner's liability. Since this Convention has not yet come into force, however, CRISTAL remains in effect, but not for ecological impairment generally. *See also* Skocypec, *The 1973 IMCO Convention: Tightening The Controls on Operational Oil Pollution from Tankers*, 5 UCLA-ALASKA L. REV. 353, 369-70 (1976).

establish vessel design and safety standards.[15]

In brief, the important provisions of the Convention are: (1) both new and existing tankers are subject to the Convention; (2) the Convention may be enforced both by flag states and the state which suffers a violation within its jurisdiction;[16] (3) vessels subject to the Convention must have an oil monitoring and control system;[17] (4) both private and public parties may present claims to the Convention and bring suit in the civil courts of a nation in which pollution damage was sustained; and (5) the Convention adopts important tanker design and operating procedure modifications.[18]

---

15. Prior conventions are traced briefly in Note, *No Dumping in This Ocean: Nearing the End of Ship-Generated Pollution*, 7 N.Y.U.J. INT'L. L. & POL. 545 (1974).

16. 1973 Convention, *supra* note 14, art. IV, at 1322. For a brief discussion of the power of coastal states to take preventive measures on the high seas to eliminate a danger of oil pollution to their shores, see Lettow, *Marine Pollution*, in FEDERAL ENVIRONMENTAL LAW 596, 616 (E. Doglin & T. Guilbert ed. 1974).

17. The monitoring system is not required for the discharge of "light refined products" (non-persistent oils) if IMCO discovers that such equipment is not available. The implication of this requirement is that such equipment is indeed available for monitoring crude oil and dirty products. However, recent studies of the availability of oil-content meters make this conclusion questionable. If the 1973 Convention requires equipment which will simply prevent gross oil pollution, the technology is undoubtedly available. If, however, as seems to be the case, the requirement is for a reasonably accurate device, capable of differentiating between perhaps 55 liters/mile and 65 liters/mile, the assumption of the availability of such a device is highly questionable. Nevertheless the presence of any control system which will at least prevent grossly polluting discharges is a welcome improvement over current practices which usually rely on little more than visual observation by the ship's personnel.

Skocypec, *supra* note 14, at 368 (footnotes omitted).

18. Old tankers of 150 tons gross tonnage or more are required to operate by load-on-top procedures and to install facilities for cleaning their cargo tanks and transferring dirty ballast residue and tank washings from cargo tanks into an approved slop tank or combination of slop tanks. 1973 Convention, *supra* note 14, Regulation 15, at 1353. All new LVCC's of 70,000 deadweight tonnage (dwt) must have a segregated ballast system. *Id.* Regulation 13, at 1351. As these design changes will not prevent spills caused when a tanker goes aground, a separate chapter attempts to minimize Torrey Canyon-type disasters by limiting the size and controlling the arrangement of cargo tanks. *Id.* Regulation 24, at 1365. The theory is that such modifications will in the case of an accident limit the discharge of oil to prescribed volume limits which are based on assumptions about side and bottom damage and hypothetical outflow. *Id.* Regulation 22, at 1362.

Not all discharges of oil, however, are prohibited by the convention. New tankers can discharge oily residues up to 1/30,000 of the total quantity of a particular cargo and old tankers can discharge up to 1/15,000. *Id.* Regulation 9, at 1343-44. These exceptions allow substantial quanti-

Unlike earlier treaties that exempted part of the Great Lakes from coverage, the Convention, because it applies to "all ships" carrying oil and designated hazardous substances, covers all such traffic on the lakes. As a practical matter, however, the Convention's primary aim is to prevent catastrophic spills from large ocean-going tankers, and many of the most significant design innovations would, by their terms, be inapplicable to the smaller-scale Great Lakes traffic.[19] The proposed Lakehead terminal will, however, conform to the Convention requirement that signatory parties provide reception facilities for oily residues from tankers and other vessels, capable of meeting without unnecessary delay the needs of ships using the terminal.[20] The terminal will have ballast water storage tanks which hold 10,000 and 30,000 barrels of water—adequate for any tanker loading there.[21]

Two earlier IMCO Conventions address the question of liability for spills and compensation for victims. The International Convention on Civil Liability for Oil Pollution Damage,[22] which is now in force, makes shipowners strictly liable for discharges prohibited by the Convention.[23] The Civil Liability Convention also provides for limited liability,[24] creating a very real possibility that a government may be unable to recover all the costs of cleaning up a spill. A second Convention, the International Convention on the Establishment of an International Fund for Com-

---

ties of oil to be discharged when a supertanker is involved. Since the Convention prohibits oil discharge within 50 nautical miles of land, *id.*, the exemption will not affect any state or province bordering the Great Lakes.

19. 1973 Convention, *supra* note 14, Regulation 2, at 1339. *See* Note, *supra* note 15, at 550-51. The largest vessels on Lake Superior weigh only 12,000 dwt. Thus the requirements imposed by IMCO on supertankers, for example, *see* note 17 *supra*, would obviously be inapplicable to Great Lakes traffic. *See* text accompanying notes 81-84 *infra*.

20. 1973 Convention, *supra* note 14, Regulation 12, at 1350.

21. U.S. Army Corps of Engineers, Draft Environmental Impact Statement, Refined Products Terminal Lakehead Pipeline Co., Inc., Superior, Douglas County, Wisconsin 63-65 (May, 1975) [hereinafter cited as Draft Environmental Impact Statement].

22. *Done* Nov. 29, 1969, *reprinted in* 65 AM. J. INT'L L. 481 (1970) [hereinafter cited as Convention—Civil Liability].

23. A shipowner is not subject to liability if the injury is a result of an act of war, an act of God, an act or omission wholly caused by a third party with intent to cause damage, or a negligent act of government in the maintenance of navigational aids. *Id.* art. III, par. 2.

24. The limitations are described in Makovsky, *Liability for Marine Environment Pollution Damage in Contemporary International Sea Law*, 6 GA. J. INT'L & COMP. L. 59, 60 (1976).

pensation for Oil Pollution Damage,[25] has been drafted to remedy this problem. It establishes an international fund, fed by a tax imposed by each signatory nation[26] on oil imported by sea, which will pay the damage claims of governments and private parties for damages beyond the Civil Liability Convention limitations. It will also partially indemnify tanker owners for the damages for which they would be liable under that Convention.[27] The Fund would allow claims for pollution damages up to $36,000,000 and cover acts of God and situations where the polluting vessel cannot be identified.[28]

The effect on state power of any of the three IMCO Conventions depends on congressional action. An international agreement ratified by the United States has the force of law, and inconsistent statutes are preempted.[29] In addition, consideration of a convention or treaty prompts Congress to make interstitial adjustments in pending legislation to cover interests not protected by the agreement. The resulting federal law may preempt a state's ability to adopt a particular form of regulation. Thus far, in response to the IMCO agreements, the Coast Guard has adopted design and operating procedure regulations which are consistent with requirements of the 1973 Convention,[30] and Congress is currently considering ratification of the Liability Convention and the Fund Convention.[31] In addition, two bills are pending that would create a domestic oil pollution fund.[32]

III. FEDERAL REGULATION OF MARINE OIL POLLUTION

A. Federal Pollution Statutes

Federal statutes and regulations attempt to prevent spills by a variety of means. The Federal Water Pollution Control Act

25. *Done* Dec. 18, 1971, *reprinted in* 66 Am. J. Int'l L. 712 (1972) [hereinafter cited as Convention—Compensation Fund].

26. *Id.* art. 10-15, at 720-23.

27. *Id.* art. 3-5, at 714-17. *See* Lettow, *supra* note 16, at 614-25; Makovsky, *supra* note 24, at 61; Wood, *An Integrated International and Domestic Approach to Civil Liability for Vessel-Source Oil Pollution*, 7 J. Maritime L. & Com. 1, 14-15 (1975).

28. Convention—Compensation Fund, *supra* note 25, art. 4; *see* Makovsky, *supra* note 24, at 61.

29. Missouri v. Holland, 252 U.S. 416, 434-35 (1920).

30. 40 Fed. Reg. 48,280 (1975). *See* text accompanying notes 79-84 *infra*.

31. *See* Wood, *supra* note 27, at 12-20.

32. *See* notes 208-12 *infra* and accompanying text.

Amendments of 1972[33] (FWPCA) attack the problem directly by prohibiting harmful land and water discharges and by imposing liability for the costs of cleaning up. The Ports and Waterways Safety Act[34] also attacks the problem directly by authorizing the Coast Guard to set vessel design and operation regulations. Admiralty navigation rules designed to avoid collisions seek the same end through indirect measures.[35]

1. *Prohibited Discharges*

Federal regulation of oil and hazardous substances discharge is authorized by section 311 of the FWPCA.[36] Section 311 prohibits vessel and on-shore facility[37] discharges of oil and hazardous substances "harmful to the public health or welfare, including but not limited to fish, shellfish, wildlife, and public and private property, shorelines and beaches,"[38] a definition based on injury to humans and human use of productive flora and fauna. Most

33. Federal Water Pollution Control Act Amendments of Oct. 18, 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified at 33 U.S.C. § 1251 *et seq.* (Supp. V 1975)).

34. Ports and Waterways Safety Act of July 10, 1972, Pub. L. No. 92-340, 86 Stat. 424 (codified at 33 U.S.C. §§ 1221-1227; 46 U.S.C. § 391a (Supp. V 1975) (amending 46 U.S.C. § 391a (1970)).

35. *See* notes 85-87 *infra* and accompanying text.

36. 33 U.S.C. § 1321 (Supp. V 1975). For a discussion of prior federal legislation and the legislative history of the Water Quality Improvement Act of 1970, Act of April 3, 1970, Pub. L. No. 91-224, 84 Stat. 25, the basis of the present section, see Swan, *International and National Approaches to Oil Pollution Responsibility: An Emerging Regime for a Global Problem*, 50 ORE. L. REV. 504, 547-62 (1971); Note, *Liability for Oil Pollution Clean-Up and the Water Quality Improvement Act of 1970*, 55 CORNELL L. REV. 973 (1970).

37. The 1972 Amendments extend federal jurisdiction over water pollution beyond the mean high tide line, the traditional extent of federal jurisdiction over navigable waters. P.F.Z. Properties, Inc. v. Train, 393 F. Supp. 1370, 1381 (D.D.C. 1975). "By recognizing federal authority to act when offensive matter is discharged from 'any point source,' 33 U.S.C. § 1362(14), the government is authorized to prevent the *entry* of pollutants into navigable waters." *Id.* See Natural Resources Defense Council, Inc. v. Callaway, 392 F. Supp. 685 (D.D.C. 1975), for an analysis of the maximum extent of federal jurisdiction over water pollution under the commerce clause. Discharges from shore facilities into a non-navigable tributary of a navigable waterway are also within the Act. United States v. American Cyanamid Co., 480 F.2d 1132 (2d Cir. 1973); United States v. Mackin Constr. Co., 388 F. Supp. 478 (D. Mass. 1975).

38. 33 U.S.C. § 1321(b)(3), (4) (Supp. V 1975). According to the National Academy of Sciences, land-based activities contribute 54 percent of oil pollution introduced into the oceans, compared to 35 percent attributable to vessels. NATIONAL ACADEMY OF SCIENCES, *supra* note 6, at 1-16.

reported spill damage has been to the aesthetic quality of beach areas or to shellfish and seabirds, and would thus be covered by this definition. It is not clear, however, that this definition encompasses damage to the stability of the ecosystem which occurs over the long run. The National Academy of Sciences, for example, has reported that certain components of spilled oil may make their way into higher links in the food chain, man included, but that "[t]here is insufficient information about percentages of which components of various types of oils enter food chains and about their ultimate fate."[39] In practice, however, the theoretical limitations of the section 311 definition are not a serious problem. The Environmental Protection Agency (EPA) has defined "harmful" broadly enough to encompass small spills which alone are not dangerous, but whose cumulative impact may be. EPA regulations define harmful amounts of oil as those which "violate applicable water quality standards"[40] or "cause a film or sheen or discoloration of the surface of the water or adjoining shorelines . . . ."[41]

The visible sheen test is logically suggested by the properties and harmful effects of oil. Although the toxicity of oils vary, most oils form surface sheens, and much damage to marine life results from contact with the sheen.[42] Equating harmfulness

39. NATIONAL ACADEMY OF SCIENCES, *supra* note 6, at 16.

40. 40 C.F.R. § 110.3(a) (1975).

41. *Id.* § 110.3(b). "Sheen" is defined as "an irridescent appearance on the surface of the water." *Id.* § 110.1(1). For an analysis of the sheen standard, see Zener, *The Federal Law of Water Pollution Control*, in FEDERAL ENVIRONMENTAL LAW 682, 750-53 (E. Doglin & T. Guilbert ed. 1974).

42. Regulations which give similarly fair notice to dischargers of hazardous chemicals are more difficult to formulate. Most chemicals do not form a sheen; the injury resulting from a discharge of chemicals is caused by direct toxic action of soluble fractions. To complicate matters further, the degree of harm is a function of the chemical's concentration in the water and the characteristics of the receiving water. Because harmfulness of a chemical discharge is a much more complex quality than harmfulness of an oil spill, it is not possible to rely on a standard as simple and automatic as the sheen test to determine which discharges are prohibited. On the other hand, to determine after proof of actual injury on a case-by-case basis whether a discharge of chemicals is harmful would undermine the effectiveness of the Act. Any regulation must therefore represent some evaluation based on the compound characteristics of the chemical of the probability of damage or harm to representative water bodies. Since the section requires the EPA to define harmful discharges of hazardous substances as those which "present an imminent and substantial danger to the public health or welfare," 33 U.S.C. § 1321(b)(2)(A) (Supp. V 1975), they understandably have been slow to implement the hazardous substance provisions of section 311.

with the existence of the sheen provides fair notice of the kinds of oil discharges that are prohibited, and thus is a practical standard for the regulation of oil spills.

2. *Federal Role in Cleanup and Damage Recovery*

Cleanup, rather than compensation, is the basic purpose of the FWPCA; the 1972 Amendments provide no private rights of action. In many cases, of course, simply cleaning up the spill will prevent or redress damage to private and public shoreland owners. The Coast Guard, for example, has sometimes replaced sand tarred by a spill as part of a clean-up operation. In the main, however, the federal scheme, like similar international programs,[43] is largely a reaction to the Torrey Canyon disaster and focuses on minimizing the damage which results when a large ship runs aground. Under the FWPCA the federal government can either choose to remove any discharge or shift the responsibility to the owner or operator of a vessel or onshore facility able to perform the job.[44]

If a marine disaster poses a substantial threat of a pollution hazard to public health, fish, or shoreline use, the federal government may, in addition to coordinating all private and public action, summarily destroy a vessel.[45] Thus, for example, the

---

On December 30, 1975 the EPA issued a set of proposed regulations setting forth its chosen methodology:

> Substances are divided into four categories on the basis of relative hazard to the environment. The smallest common commercial container size (one pound/454 grams) was then defined as the harmful quantity for all members of the most highly toxic category. Other categories were therefore assigned harmful quantities on a proportional basis. If the upper aquatic toxicity of a category was ten times higher than the upper limit of the preceding more toxic category, then the harmful quantity was set ten times larger. . . .

Proposed Environmental Protection Agency Regulations on Determination of Harmful Quantities of Hazardous Substances, 40 Fed. Reg. 59,982, 59,984 (1975).

Because any regulation must incorporate some presumption about the probability of damage, the regulations finally adopted by the EPA will be controversial. Environmentalists will attack the estimate of damage as too low, while shippers will make the opposite attack. Still, the proposed regulations seem rational enough to withstand judicial scrutiny, provided they are supported by an adequate scientific record. *See* National Resources Defense Council, Inc. v. Train, 519 F.2d 287 (D.C. Cir. 1975), a case involving the classification of toxic substances under section 307 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1317(a)(6) (Supp. V 1975).

43. *See* notes 22-28 *supra* and accompanying text.

44. 33 U.S.C. § 1321(c)(1) (Supp. V 1975).

45. *Id.* § 1321(d).

Navy could be ordered to bomb a vessel to sink it. Summary abatement is not at the expense of the vessel but "shall be a cost incurred by the United States Government . . . ."[46] This section adopts the common law rule that private property may be destroyed without compensation by the government in an emergency situation.[47]

As part of a National Contingency Plan drafted to allocate clean-up and containment responsibilities among the various federal agencies,[48] the Great Lakes are under the jurisdiction of the Coast Guard. Under Coast Guard regulations, each shoreland facility must prepare a spill prevention and control manual.[49] Since each spill presents different problems, however, the plans will have limited utility apart from ensuring that needed equipment and manpower are available. Moreover, at present, spill clean-up technology is primitive, albeit evolving. According to the Environmental Impact Statement prepared for the Superior, Wisconsin tank farm, it

> is presently possible to control and clean up a spill of 100,000 barrels only if it occurs in a relatively confined area, such as a small enclosed bay or channel and only if a well organized and equipped work force arrived at the spill within the first few hours or so. . . . Containment and cleanup of a 100,000 barrel off-shore spill would be virtually impossible with present day equipment unless calm weather and current conditions were present for a week or more and state-of-the-art skimming vessels were readily available.[50]

3. *Liability Limitations*

a. Liability Limitations for Clean-up Costs

The federal government is not primarily responsible for the costs of cleaning up a spill. At the heart of the 1972 Amendments

---

46. *Id.*

47. In United States v. Caltex, Inc., 344 U.S. 149 (1952), the Court held that the United States Army need not compensate the owners of an oil terminal in the Philippines which was destroyed in 1941 as Japanese troops were entering Manila. Relying on an earlier case, Jurague Iron Co. v. United States, 212 U.S. 297 (1909), which denied recovery for the destruction of a Cuban factory thought to house the germs of a contagious disease, Chief Justice Vinson wrote: "[T]he common law had long recognized that in times of imminent peril—such as when a fire threatened a whole community—the sovereign could, with immunity, destroy the property of a few that the property of many and the lives of many more could be saved." 344 U.S. at 154.

48. *See* note 90 *infra.*

49. 33 C.F.R. §§ 154.300-.330 (1975).

50. Draft Environmental Impact Statement, *supra* note 21, at 62. *See generally* Lettow, *supra* note 16, at 634-35. MASS. ANN. LAWS ch. 21,

is section 331(f) which imposes strict liability for all discharges, subject to four defenses,[51] and enforces this liability by a maritime lien on vessels. In return for the imposition of strict liability, vessel owners and operators are given the benefit of limited liability. Amounts recovered by the federal government cannot exceed $100 per gross ton or $14,000,000 whichever is less.[52] If the discharge is the result of willful negligence or willful conduct within the privity and knowledge of the owner, however, the government may recover all the costs of the cleanup.[53] With regard to onshore facilities, the government is given a federal cause of action but does not have a lien, and liability is limited to $8,000,000.[54] To ensure that vessels can meet their responsibilities within these limitations, the Federal Maritime Commission requires a Certificate of Financial Responsibility which may be granted only upon showing both an accurate figure for gross registered tonnage of the vessel and the insurer's verification of requisite coverage.[55] Failure to comply with these regulations may result in denial of Federal Maritime Agency clearance or

---

§ 50A (Supp. 1975), requires each terminal facility to maintain a boom capable of encircling a ship discharging oil.

51. 33 U.S.C. § 1321(f)(1) (Supp. V 1975). To escape liability the owner or operator must prove that the discharge was caused solely by an act of God, an act of war, negligence on the part of the United States Government, or an act or omission of a third party, regardless of whether such acts or omissions were negligent. Two cases have construed the third and fourth defenses. The court in Burgess v. M/V Tamano, 373 F. Supp. 839 (D. Me. 1974), said in dictum that if the United States negligently maintains buoys or negligently fails to contain the flow of oil from a vessel, the United States is liable to the same extent that a private person would be liable in tort. Thus, it is potentially liable to owners of shore property, commercial fishermen, and the state. In *Burgess* the ship owners and others made the imaginative but unsuccssful argument that by promulgating oil spill contingency plans, the government caused them to rely on the availability of clean-up equipment and personnel on shore. When a spill occurred the shipowners were entitled to indemnity because the government was liable for damages incurred by third parties as a result of the inadequacy of the plans or failure to comply with them. In United States v. General Motors, 403 F. Supp. 1151 (D. Conn. 1975), the court imposed a civil penalty on the owner of an abandoned factory, which was being patrolled by the owner, for a discharge caused by vandals who broke into the plant and opened fuel storage tanks.

52. 33 U.S.C. § 1321(f)(1) (Supp. V 1975).

53. *Id.* Legislative history not surprisingly sheds little light on the standard of liability incorporated by the term "willful." For a brief discussion of possible instances of willful negligence, see Swan, *supra* note 36, at 555-58.

54. 33 U.S.C. § 1321(f)(2) (Supp. V 1975).

55. 46 C.F.R. §§ 542.3-.5 (1975).

Coast Guard refusal of entry into any port or navigable waters of the United States.[56]

Liability limitations have historically been determined with reference to the private marine insurance market.[57] Both IMCO's and the federal government's decisions to base their liability limitations on those set by commercial insurers reflect a policy judgment that the potential benefits of subjecting shipowners and charters to unlimited liability are outweighed by the costs.[58] Private insurers have been steadily increasing their limits since the Torrey Canyon;[59] the current limit is $25,000,000.[60] Since liability limitations affect the competitive positions of fleets around the world, they cannot be set with an eye toward environmental effects alone. Moreover, modern liability limitation provisions must be integrated with older limitation statutes that were not designed to balance environmental and economic factors.

b. Liability Limitations for Personal Injury and Property Damage

The most important of the older federal statutes limiting maritime liability is the Limitation of Liability Act of 1851,[61] which is an indirect subsidy to the United States Merchant Marine. Under this Act, a shipowner may, regardless of fault, limit his liability in a personal injury or property damage action to the value of the vessel after the accident.[62] This leaves open the possibility that one who owns a vessel at fault or who is chargeable with privity of knowledge may nonetheless avoid payment.

---

56. *Id.* § 542.10.

57. Lipeles, Oil: A Study of Pollution Insurance and Liability Limit Laws (Oct. 10, 1975) (unpublished study by the Environmental Policy Institute).

58. Healy & Paulsen, *Marine Oil Pollution*, 1 J. MARITIME L. & COM. 57 (1970), argue, for example, that unlimited liability will drive independent carriers out of the market and thus raise the price of petroleum products.

59. Lipeles, *supra* note 57, at 29-31.

60. *Id.* at S-5. A recent study by the Environmental Policy Institute concludes that reinsurers have increased their coverage without increasing their effective exposure, thus raising the possibility that commercial insurers can profitably assume greater risks. *Id.* at 31. Others have argued that the international marine insurance market has the financial capacity to insure against considerably larger losses than it now does. *See* Bergman, *No Fault Liability For Oil Pollution Damage*, 5 J. MARITIME L. & COM. 1, 38-50 (1973).

61. 46 U.S.C. §§ 183-89 (1970).

62. *Id.* § 183(a).

To use a celebrated example, after the Torrey Canyon went aground, its owners valued the tanker at fifty dollars, equivalent to the value of a lifeboat.[63] The liability provisions of the 1972 Act, superceding those of the 1851 Act for clean-up costs, take away from the shipping industry some of the subsidy conferred by the earlier statute. Property and personal injury damages remain subject to the 1851 limitations. Because liability for clean-up costs under the FWPCA is enforced by a maritime lien, shipowners would be liable to personal injury and property damage claimants only to the extent that the remaining value of the vessel exceeded either the actual costs of cleanup or the FWPCA monetary limitations.[64]

4. *Monetary Penalties*

Catastrophic spills are easily detected, but small spills, especially of hazardous substances, are difficult to detect,[65] creating a risk that a number of spills whose cumulative effect may be serious will remain unknown and unremedied.[66] The unlikelihood of detecting small spills is an obvious disincentive to efforts by owners of vessels and shore facilities to prevent spills or to remedy the resulting damage. Although increased manpower commitments by the Coast Guard provide a partial solution, the 1972 Amendments do not rely on greater policing efforts alone, but make it a crime for the person in charge[67] of

63. *In re* Barracuda Tanker Corp., 281 F. Supp. 228 (S.D.N.Y. 1968), *modified*, 409 F.2d 1013 (2d Cir. 1969).

64. G. GILMORE & C. BLACK, THE LAW OF ADMIRALTY § 10-4(b), at 828-29 (2d ed. 1975). The relationship between the liability limitations of the 1972 Amendments and state spill damage recovery legislation is discussed at text accompanying notes 164-207 *infra*.

65. *See* discussion note 42 *supra*.

66. In United States v. W.B. Enterprises, Inc., 378 F. Supp. 420 (S.D.N.Y. 1974), the court, allowing recovery of a civil penalty for a 25-30 gallon spill, noted: "It does not matter that the quantum of damage is incapable of precise measurement." *Id.* at 423.

67. 33 U.S.C. § 1321(b)(5) (Supp. V 1975). "In charge" was construed by a federal district court to exclude a negligent tank truck driver who sat in his truck while fuel overflowed during a delivery. The purchaser had no guage on its tank, and thinking that the tank was low, prematurely ordered more fuel. This was sufficient to put the purchaser as well as the truck driver at fault. The court, applying ordinary sales law, concluded that "the tank itself was the discharging facility, and that, in spite of defendant's duty of oversight, it was not in its charge." More generally, Judge Aldrich reasoned:

> I appreciate the government's interest in having an oil spill reported immediately, but this interest does not serve to define who was "in charge," or vary the natural meaning of that term.

a vessel or facility to fail to inform the appropriate federal agency of any discharge of oil or a hazardous substance.[68] Corporations are "persons" under the Act,[69] and may be fined for failure to report a spill. When the federal government learns from any source that a spill has occurred, it may remove the substance and recover the actual costs of the cleanup from the discharger or third party responsible. If a hazardous substance is involved and nonremovable, a variable penalty, computed by taking into account the toxicity, degradability and dispersal characteristics of the substance, may be recovered.[70] In addition, a per occurrence civil penalty of up to $5000 may be assessed against a discharger of oil or hazardous substances in harmful amounts.[71] Assessment of the $5000 penalty will often be based on evidence furnished under the mandatory reporting provision of the statute; hence, if the penalty is characterized as criminal, it arguably conflicts with the privilege against self-incrimination at least where individuals, rather than corporations, are involved.[72] Despite congressional attempts to eliminate this constitutional barrier by providing that any evidence obtained through notification shall not be used against the informant in a

---

"In charge" is at once broader, and narrower, than the government perhaps conceives. It is broad because it covers the party in charge of the facility even though he had nothing to do with the spill. It is narrower, in that it does not include everyone who participates in the act. I am aware that in the legislative history there is reference to the fact that the person intended to report is the one "operationally responsible for . . . the facility." However, this term, if to be looked to at all, must be read in context with the statutory term "in charge." One having a mere temporary connection is not "operationally responsible" in that sense.

The basic difference is illustrated by the cases of United States v. Gainey, 1965, 380 U.S. 63, 85 S. Ct. 754, 13 L. Ed. 2d 658, and United States v. Ramano, 1965, 382 U.S. 136, 86 S. Ct. 279, 15 L. Ed. 2d 210. In *Gainey* the Court held that a defendant's presence at the scene of an illegal still justified an inference (and hence a statutory presumption), that he was engaged in operating it. However, in *Romano* the Court held that it did not warrant the further inference that he was in possession. I cannot look to legislative history, particularly of a criminal statute, to enlarge to mere contact a phrase that clearly denotes possession and dominion.

United States v. Mackin Constr. Co., 388 F. Supp. 478, 480-81 (D. Mass. 1975) (citations omitted).

68. 33 U.S.C. § 1321(b)(5) (Supp. V 1975).

69. *Id.* § 1321(a)(7). *See* Apex Oil v. United States, 530 F.2d 1291 (8th Cir. 1976), *cert. denied*, 45 U.S.L.W. 3250 (U.S. Nov. 5, 1976).

70. 33 U.S.C. § 1321(b)(2)(B)(ii) (Supp. V 1975).

71. *Id.* § 1321(b)(6).

72. The privilege against self-incrimination has been held inapplicable to corporations. *See* United States v. Mobil Oil Corp., 464 F.2d 1124 (5th Cir. 1972).

criminal prosecution and that only a civil penalty shall be assessed against a discharger,[73] the three federal district courts that have heard constitutional challenges to the penalty have split on the issue of whether the sanction is criminal or civil.[74] Because the constitutionality of the fine is an open question[75] and the amount of the fine is too small to make the government whole for the cost of cleaning up a spill or to pose a significant deterrent to dischargers, the penalty serves little purpose as part of the statutory scheme.

B. Regulation of Ship Design and Operation

1. *Statutes and Administrative Regulations*

Subjecting tanker owners to strict liability, even with the accompanying limitation of liability,[76] will provide substantial incentives to take spill prevention measures. The high cost of detecting spills on the high seas and open waters, however, is

---

73. 33 U.S.C. § 1321(b)(5) (Supp. V 1975). Congressional classification of a penalty as civil or criminal is, of course, subject to judicial review. *See* Kennedy v. Mendoza-Martinez, 372 U.S. 144 (1963).

74. In United States v. LeBoeuf Brother Towing Co., 377 F. Supp. 558 (E.D. La. 1975), the court held that the penalty is criminal. The decision is commented upon favorably in Comment, *The Compulsory Self-Disclosure and Penalty Provisions of the 1972 Amendments to the Federal Water Pollution Control Act: Catch-22 at Sea*, 49 Tul. L. Rev. 1124 (1975). For decisions holding that the penalty is civil, see United States v. Mar-Tee Contractors, Crim. No. 75-156 (D.N.J., Jan. 30, 1976), 8 ERC 1925; United States v. General Motors, 403 F. Supp. 1151 (D. Conn. 1975).

75. The conclusion of the court in United States v. General Motors Corp., 403 F. Supp. 1151 (D. Conn. 1975), that "the civil penalty established by 33 U.S.C. § 1321(b)(6) is remedial in nature, and can be imposed in administrative or civil proceedings in harmony with the fifth and sixth amendments," *id.* at 1163, is questionable; an equally obvious purpose of the statute is to deter harmful conduct. The court's answer to this argument is not wholly convincing:

> The two overriding purposes of the civil penalty provision of the FWPCA appear to be the elimination of oil spills through deterrence, and the collection of revenue to support federal clean-up efforts and the administration of the act. The civil penalty has an effect akin to punishment, but this is an unavoidable by-product of these purposes. The Court cannot substitute its own judgment for the informed choice of the Congress by interpreting this by-product to be the primary purpose of the statute.

Id. For a discussion of the difficult constitutional questions involved in characterizing a penalty as civil or criminal, see Clark, *Civil and Criminal Penalties and Forfeitures: A Framework for Constitutional Analysis*, 60 Minn. L. Rev. 381 (1976).

76. *See* notes 51-64 *supra* and accompanying text.

causing international regulatory bodies[77] and the federal government to institute direct regulation of ship design and operation to supplement the indirect regulation accomplished by imposition of strict liability. Segregated ballast systems[78] and double bottoms are the major design innovations suggested, for they would in theory eliminate most intentional oily ballast discharges and prevent another Torrey Canyon disaster.

The Ports and Waterways Safety Act of 1972 authorizes the Coast Guard to establish such design and construction standards, consonant with those of the 1973 IMCO Convention for the prevention or mitigation of damage to the marine environment, and to promulgate rules regarding vessel maneuvering and stopping ability in hazardous circumstances.[79] In late 1975 the Coast Guard adopted standards applicable as of January 1, 1976 to any ship entering United States navigable waters.[80] Consistent with the 1973 IMCO Convention, the regulations require segregated ballast systems[81] but not double bottoms on tankers.[82] The Coast

77. *See* note 18 *supra* and accompanying text.

78. For a description of segregated ballast systems, see Cummins, Logue, Tollison, & Willett, *Oil Tanker Pollution Control: Design Criteria vs. Effective Liability Assessment*, 7 J. MARITIME L. & COM. 169, 173-74 (1975) [hereinafter cited as Cummins].

79. 46 U.S.C. § 391a (Supp. V 1975).

80. 40 Fed. Reg. 48,280 (1975). For background on the regulations, see *Hearings Before the National Ocean Policy Study of the Senate Comm. on Commerce on the Safety of Supertankers*, 94th Cong., 1st Sess. (1975).

81. Segregated ballast systems are required by the 1973 IMCO Convention for new tankers of over 70,000 dwt. *See* note 18 *supra*. The segregated ballast regulations, 40 Fed. Reg. 48,280 (1975), have already survived a challenge by the Natural Resources Defense Council in a suit alleging that the requirements fall short of the congressional intention expressed in the statute. Natural Resources Defense Council, Inc. v. Coleman, 411 F. Supp. 449 (D.D.C. 1975). The court assumed that the statute imposed a legal duty on the Coast Guard to write the best possible regulation on the subject, but concluded, after giving due weight to the expertise of the agency and the general "heated debate" over regulation in the area, that it was not possible for them to do better. Since the Coast Guard was in the process of revising the regulation, the court refused to set a timetable for the publication of a new regulation.

Proponents of the double bottom requirement argue that segregated ballast systems will reduce intentional but not accidental discharges, whereas double bottoms can significantly reduce accidental discharges. This argument is corroborated by Coast Guard studies which show that in 31 tanker casualties resulting in bottom damage and pollution to United States waters, a double bottom design would have reduced by 85 percent the amount of oil discharged. *Hearings on Proposed Regulations . . . to Require that All Large Tankers Contracted After Jan. 1, 1976, Entering United States Territorial Waters Be Equipped with Segregated Ballast Tanks Before the Subcomm. on Coast Guard and Naviga-*

Guard safety regulations are also similar to the IMCO standards[83] in that they are intended to prevent disastrous spills from supertankers and thus will not have a direct impact on the relatively small ships that traverse Lake Superior. The largest vessels on the lake weigh only 12,000 dwt, 8000 dwt short of the minimum weight covered by the most stringent double bottom, segregated ballast legislation introduced in the Congress.[84]

2. *Admiralty Rules of Navigation*

Oil tanker collisions are an increasing problem in the crowded shipping lanes and harbors of the world. Navigation of supertankers is extremely difficult and the level of seamanship on ships flying flags-of-convenience, such as Liberia, poses serious

---

tion of the House Comm. on Merchant Marine and Fisheries, 93d Cong., 1st Sess. 39-40 (1973). The Coast Guard is still studying the question of double bottoms, *see* Pedrick, *Liability, Compensation and Prevention of Oil Spills: A North American Perspective*, 1 EARTH L.J. 301, 313 (1975), but currently maintains that such a requirement, which would increase the cost of supertankers by nine percent at a time when the United States merchant fleet needs massive subsidies to survive, is impractical. A cost-benefit analysis of proposed Coast Guard regulations requiring segregated ballast systems and partial double bottoms concludes "the benefits come nowhere near matching the costs of double skin segregated ballast oil tanker design criteria." Cummins, *supra* note 78, at 205. When the current unmeasurable costs of undetected discharges on the high seas are considered, however, the authors suggest that "[i]mposition of design standards may . . . be optimal if the social loss from tanker pollution is high and polluting activities cannot be monitored and liability assessed at reasonable cost." *Id.* It is also argued that the unilateral adoption by the United States of a double bottom standard would work against the general interest in curbing ocean pollution, for oil would be shipped in older, less safe flag-of-convenience tankers. *See Hearings, supra* note 80, at 2025.

82. The IMCO Convention does not require double bottoms. The 1973 IMCO standards represent one of the few instances in which IMCO led, rather than followed, the shipping industry in imposing standards for the United States. The Coast Guard, which at the time of the Convention was considering regulations requiring double bottoms, changed its position to conform to IMCO. *See* the comments of Richard Frank, *A Closer Look at Some Issues for Geneva—Oceans Policy, Marine Environment, and Fisheries*, 14 COLUM. J. TRANSNAT. L. 56, 67-68 (1975).

83. *See* note 18 *supra*.

84. In 1975 Senator Magnuson introduced legislation to require double bottoms and segregated ballast systems for all vessels of more than 20,000 dwt engaged in carrying oil to United States ports. Tanker Safety Improvement Act, S. 333, 94th Cong., 1st Sess., 121 CONG. REC. 707-08 (1975). The average size of tankers built between 1920 and 1945 was 12,000 dwt. For a brief history of the evolution of tanker sizes and tanker management problems generally, see L. KENDALL, THE BUSINESS OF SHIPPING 285-304 (2d ed. 1976).

problems. "[T]o a disconcerting degree, oil cargoes have been delivered in recent years by improperly trained and uncertified officers aboard ships navigating with defective equipment."[85] The Rules of Navigation[86] are derived from the days of sailing ships, and the general fault standard of "prudent seamanship" developed under the Rules does not take into account technological developments such as radar and the supertanker. Regulation under the law of navigation, therefore, has limited potential as a deterrent to conduct that causes the accidental discharge of oil and other hazardous substances.[87]

C. Cooperation with Canada

The United States and Canada share jurisdiction over Lake Superior as international waters. Since both countries regard the Great Lakes as internal waters rather than high seas, regulatory jurisdiction is further shared between federal and state or pro-

85. N. Mostert, Supership at 59 (1974).

86. Under admiralty law, a vessel which collides with another vessel is liable if the colliding vessel was at fault. Gilmore & Black, *supra* note 64, § 7-2, at 486. The general fault standard, "prudent seamanship," has been supplemented by legislation and administrative regulations. Congress has enacted navigation rules for the Great Lakes and their connecting waters, 33 U.S.C. §§ 241-295 (1970), and there are Coast Guard regulations for Great Lakes navigation. Besides standardizing safety requirements and operating procedures in fog and other dangerous situations, the rules have important legal consequences. Cause in fact must be established in admiralty before a ship can be held liable for damage. Gilmore & Black, *supra*, § 7-5, at 494. Under the Pennsylvania rule if one ship fails to comply with the Rules of Navigation before the collision, to escape liability "the vessel thus cast in fault must prove . . . not only that the fault probably did not but also that it *could not* have contributed to causing the collision." *Id.*

87. There is still no duty to use radar, but all large ships are, of course, equipped with it. And it has been suggested that as a result of this adoption of technology "courts will consider them [vessels] unseaworthy if they are lacking in such equipment." Healy, *Radar and the New Collision Regulations*, 37 Tul. L. Rev. 621, 629 (1963). No case has so held, however. One court suggested in dictum that if radar is aboard, it is negligent to fail to use it unless visibility is perfect and actual harm might have resulted if the master left the bridge to consult the radar. Marcoeano Compania Naviera, S.A. v. S.S. Verdi, 438 F.2d 854, 856 (2d Cir. 1970). The extent to which radar information replaces the traditional navigation information of sight and sound is a complex question. The International Regulations for Preventing Collisions at Sea, 33 U.S.C. §§ 1051-91 (1970), enforced for all United States vessels on the high seas but not on the Great Lakes, requires a vessel in restricted visibility to go at moderate speed. Under the Annex to Rule 16, radar is a factor to be taken into account in determining what is moderate speed, if radar will provide information about another vessel or obstacle such as an iceberg. *Id.* § 1094(b). *See* Meadows, *The Radar Annex and Rule*

vincial governments. The two countries have a long history of cooperation concerning Great Lakes water pollution.[88]

A 1909 treaty with Great Britain established the International Joint Commission (IJC).[89] While the IJC has no direct authority to regulate pollution, it may at the request of both governments investigate problems and make recommendations which must then be implemented by compatible American and Canadian legislation. IJC concern with vessel pollution on the Great Lakes resulted in the 1972 Great Lakes Water Quality Agreement which expressed a joint commitment to a number of measures designed to prevent ship and onshore discharges of oil and hazardous substances.[90]

In addition, Canadian pollution prevention legislation complements United States statutes and regulations. The Canada Shipping Act[91] establishes uniform vessel design and performance standards and provides for post-spill liability.[92] A shipowner is strictly liable in admiralty for the costs of cleaning up or prevent-

---

16 of the Regulations For Preventing Collisions at Sea, 1960, as They Affect Navigation in Restricted Visibility, 5 WILLAMETTE L.J. 399 (1969).

88. The definitive analysis of Canadian-United States pollution control cooperation is Bilder, *Controlling Great Lakes Pollution: A Study in United States-Canadian Environmental Cooperation*, 70 MICH. L. REV. 469 (1972).

89. Treaty with Great Britain Relating to Boundary Waters Between the United States and Canada, Jan. 11, 1909, 36 Stat. 2448, 2450 (1909), T.S. No. 548 (effective May 13, 1910).

90. Agreement between Canada and the United States of America on Great Lakes Water Quality, April 15, 1972, [1972] 23 U.S.T. 301, T.I.A.S. No. 7312, *reprinted in* J. BARROS & D. JOHNSTON, THE INTERNATIONAL LAW OF POLLUTION 127 (1974). For example, Annex 3, which deals with vessel design, construction, and operation, states:

> Compatible regulations shall be adopted for the prevention of discharges into the Great Lakes System of harmful quantities of oil and hazardous polluting substances from vessels in accordance with the following principles:
>
> (a) Discharges of harmful quantities of oil or hazardous polluting substances shall be prohibited and made subject to appropriate penalties;
>
> (b) As soon as any person in charge has knowledge of any discharge or harmful quantities of oil or hazardous polluting substances, immediate notice of such discharge shall be given to the appropriate agency in the jurisdiction where the discharge occurs; failure to give this notice shall be made subject to appropriate penalties.

Id. at 142. On June 19, 1974, the two countries signed a Joint Canada-United States Marine Contingency Plan "for spills of oil and other noxious substances," [1974] 25 U.S.T. 1280, T.I.A.S. No. 7861. *See* ROVINE, 1974 DIGEST OF UNITED STATES PRACTICE IN INTERNATIONAL LAW 69-70.

91. An Act to Amend the Canada Shipping Act, 19-20 Eliz. 2 c. 27 § 736 *et seq.*, at 543 (1971).

92. *Id.* §§ 736-69, at 543-75.

ing the spread of a spill as well as for all "actual loss or damage incurred by her Majesty in right of Canada or a province or any other person resulting from the discharge of a pollutant into waters to which this Part applies . . . ."[93] Third party acts which contribute to the pollution, acts of war or God, intentional acts done to cause harm, and government negligence in the maintenance of navigational aids are defenses that absolve the shipowner.[94] Like the United States water pollution statute,[95] the Shipping Act provides for limited liability.[96] The Canadian legislation also establishes a Maritime Pollution Claims Fund, fed by damage action recoveries and export and import fees on oil shipped to and from Canada,[97] for the recovery of civil damages. The federal government, a province, or any other person having a claim against the owner of the ship or cargo may apply to the fund for compensation for injuries sustained as a result of a spill when the ship that caused the pollution cannot be identified.[98]

IV. STATE REGULATION OF MARINE POLLUTION

As a general proposition concerning the allocation of regulatory jurisdiction between the federal and state governments, it may be said that direct methods of preventing spills, such as vessel design and operating standards, are within the federal province, while the states are confined to such indirect methods as liability rules governing the recovery of post-spill damages.[99] Although state power may be thus circumscribed, a regulatory strategy confined to compensating public and private parties suffering spill damage may still offer a high level of environmental protection.

Although many writers properly emphasize the potential risks of long term marine damage from oil spills, available scientific information suggests that the certain hazards posed by oil spills—damage to fish, wildlife and beach property—are not irre-

93. *Id.* § 743(1)(d), at 553.
94. *Id.* § 774(1), at 555.
95. 33 U.S.C. § 1251 *et seq.* (Supp. V 1975).
96. 19-20 Eliz. 2, c. 27, § 744(4), at 556 (1971).
97. *Id.* § 746, at 558-59.
98. *Id.* § 754(1), at 562. A fisherman, for example, who cannot otherwise recover may apply to the fund for compensation. *Id.* § 755, at 563-64.
99. *See* notes 164-207 *infra* and accompanying text; Swan, *American Waterways: Florida Oil Pollution Legislation Makes It Over the First Hurdle*, 5 J. MARITIME L. & COM. 77, 91 (1973).

parable.[100] Thus, although a case exists for attempting to minimize all spills by direct as well as indirect regulation, a compensatory plan may be enough to restore damaged resources. Because of the limited protection of property and economic interests afforded by the FWPCA, however, several states have gone further and adopted legislation which blurs the distinction between direct and indirect regulation. This legislation raises important questions concerning the scope of permissible state regulatory authority. Moreover, states may attempt to achieve what they may be unable to do directly, for example, prohibiting tankers from entering a port, by indirect means such as coastal zone land use controls that deny use of the coast for reception facilities.

A. Theoretical Basis for State Spill Liability Legislation

The power of a littoral state to preserve the quality of Great Lakes water stems from its sovereignty over navigable waters within its jurisdiction.[101] Because all members of the public share in their use, the state is said to hold navigable waters and the beds underlying them in trust for the benefit of all citizens.[102] Historically, the public trust doctrine has been invoked in situations where a state attempted to transfer ownership of trust lands to private parties. Courts have created a patchwork of restraints on the ability of the state to make such transfers.[103] To restrain the states in the name of the public interest, courts have imposed a higher burden on the states to justify disposition of trust resources to private parties than they have imposed with regard to other state-controlled resources.[104] Two principles relevant to the ability of upper Great Lakes states to adopt a

---

100. *See* note 6 *supra.*

101. *See* People v. State Tax Comm., 247 N.Y. 9, 159 N.E. 703 (1928); Minnesota Canal & Power Co. v. Pratt, 101 Minn. 197, 112 N.W. 395 (1907). State jurisdiction over the Great Lakes is subject to federal power in matters involving treaties or international or interstate commerce. Wisconsin v. Illinois, 278 U.S. 367 (1929); Sanitary Dist. of Chicago v. United States, 266 U.S. 405 (1925).

102. Martin v. Waddell, 41 U.S. (16 Pet.) 367 (1842), held that the original 13 states succeeded to rights held by the Crown in its sovereign capacity; Pollard's Lessee v. Hagen, 44 U.S. (3 How.) 212 (1845), held that new states have the same rights under the equal footing doctrine. The public trust doctrine and the complex problems of public and private ownership of submerged lands are analyzed in Maloney & Ausness, *The Use and Legal Significance of the Mean High Water Line in Coastal Boundary Mapping*, 53 N.C.L. Rev. 185 (1974).

103. *See, e.g.*, Illinois Central R.R. v. Illinois, 146 U.S. 387 (1892).

104. For a comprehensive discussion of the cases, see Sax, *The Public Trust Doctrine of Natural Resources Law*, 68 Mich. L. Rev. 471 (1970).

spill prevention strategy for Lake Superior have emerged from the public trust cases. First, the definition of public rights in navigable waters has been expanded to include not only navigation, but also recreation and perhaps maintenance of environmental quality as well.[105] Second, since the state is charged with protecting public rights in natural resources, the trust doctrine reinforces the sovereign's discretion to choose environmental protection over development as a desired use of the lake.

Lake Superior's bed and waters are held in trust by the littoral states, subject to the federal government's paramount authority to regulate navigation under the commerce and admiralty powers.[106] Within these constraints, the states have the power to decide how the waters of Lake Superior shall be allocated among competing uses,[107] provided that power is exercised

---

105. The strongest case supporting the recognition of public rights for environmental uses is Marks v. Whitney, 6 Cal. 3d 251, 491 P.2d 374, 98 Cal. Rptr. 790 (1971). *See* Note, *Environmental Law—Expanding the Definition of Public Trust Uses*, 51 N.C.L. REV. 316 (1972); Comment, *The Public Trust in Tidal Areas: A Sometime Submerged Traditional Doctrine*, 79 YALE L.J. 762, 781-87 (1970).

106. *See* Hillhouse, *The Federal Law of Water Resources Development*, in FEDERAL ENVIRONMENTAL LAW 844, 852-61 (E. Doglin & T. Guilbert. ed. 1974). For a discussion of federal preemption, see text accompanying notes 221-47 *infra*. An excellent recent survey of the history of the public trust doctrine comes to the same conclusion that I have: the function of the doctrine is not so much to restrain state legislatures as to remind them that they have the discretion to opt for environmental protection. Deveney & Title, *Jus Publicum, and the Public Trust: An Historical Analysis*, 1 SEA GRANT L.J. 13 (1976). The authors of this survey note that:

> Arguments phrased in terms of absolutes ignore the primary lesson learned from ten years of attempts to develop and manage the coastal area rationally: the land-sea interface is necessarily an area of conflict between bona fide competing interests. This conflict cannot be resolved by the use of such historical talismans as the public trust or by simple appeal to supposed moral imperatives and uncritical sentiment rooted in myth
>
> . . . .

In addition, they add that "[t]he public trust doctrine and the jus publicum are not in themselves" positive principles of resource allocation; "they represent only a continuing commitment of the state *not necessarily* to alienate the coastal area resources of the state from public uses." Deveney & Title, *supra* at 80-81.

107. The Supreme Court has made clear that a state subjected to pollution from beyond its borders can require the offending state to reduce the pollution. In Georgia v. Tennessee Copper Co., 206 U.S. 230 (1906), Justice Holmes described the state's interest in its resources as "quasi-sovereign" and wrote that a state "has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air." *Id.* at 237. More recently, in Illinois v. Milwaukee, 406 U.S. 91 (1971), Justice Douglas suggested in dictum that "a state . . . may well ask that its strict standards be honored and that it not be compelled to lower itself to the more degrading standards of a neigh-

reasonably. In the context of environmental protection, regulations designed to minimize risks of an activity are vulnerable to attack as arbitrary and capricious unless justified by adequate scientific findings of harm caused by the activity.[108] Recent federal cases, however, give legislative and administrative bodies broad discretion to make a risk-benefit analysis in establishing environmental standards.[109] The Supreme Court of California has taken a similar view. Quoting with approval a discussion of the general environmental risks of marine pollution, the court in *People ex rel. Younger v. Superior Court*[110] held that the state can recover damages for unquantifiable harms:

> The harm caused not only to the waters themselves but to wildlife and marine life dependent upon them as well as its pervasive and continued effect defies a general assessment of damages to say nothing in terms of their calculation in terms of money. Thus the monies collected civilly . . . operate to more fully compensate the people of this state and are not beyond an amount equivalent to the harm done.[111]

B. Recovery Pursuant to General Water Pollution Legislation

General water pollution legislation is one method by which the littoral states may guard against oil pollution on Lake

---

bor." *Id.* at 107. *See also* Washington v. General Motors Corp., 406 U.S. 109 (1971).

108. *See* Ethyl Corp. v. Environmental Protection Agency, Civ. No. 73-2205, (D.C. Cir., decided March 19, 1976), 8 ERC 1785.

109. An example of a court's willingness to uphold state regulation where the harm sought to be avoided is not certain is found in the Eighth Circuit opinion in the *Reserve Mining* case.

> In assessing probabilities in this case, it cannot be said that the probability of harm is more likely than not. Moreover, the level of probability does not readily convert into a prediction of consequences. On this record it cannot be forecast that the rates of cancer will increase from drinking Lake Superior water or breathing Silver Bay air. The best that can be said is that the existence of this asbestos contaminant in air and water gives rise to a reasonable medical concern for the public health. The public's exposure to asbestos fibers in air and water creates some health risk. Such a contaminant should be removed.
>
> As we demonstrate in the following sections of the opinion, the existence of this risk to the public justifies an injunction decree requiring abatement of the health hazard on reasonable terms as a precautionary and preventive measure to protect the public health.

Reserve Mining Co. v. Environmental Protection Agency, 514 F.2d 492, 520 (8th Cir. 1975). *See also* Ethyl Corp. v. Environmental Protection Agency, Civ. No. 73-2205, (D.C. Cir., decided March 19, 1976), 8 ERC 1785; Amoco Oil Co. v. Environmental Protection Agency, 501 F.2d 722 (D.C. Cir. 1974).

110. 16 Cal. 3d 30, 544 P.2d 1322, 127 Cal. Rptr. 122 (1976).

111. *Id.* at 137-39, 544 P.2d at 1326-27, 127 Cal. Rptr. at 126-27.

Superior and the other Great Lakes. Minnesota's water pollution legislation, for example, provides sanctions which are adequate to deal with small-scale spills. Minnesota law defines two standards for imposition of liability for a spill. First, "pollution" is defined broadly:

> "Pollution of water," "water pollution," or "pollute the water" means: (a) the discharge of any pollutant into any waters of the state or the contamination of any waters of the state so as to create a nuisance or render such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, agricultural, commercial, industrial, recreational or other legitimate uses, or to livestock, animals, birds, fish or other aquatic life; or (b) the man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of waters of the state.[112]

This definition is supplemented by the interstate standards, which provide:

> No sewage, industrial waste or other wastes shall be discharged into any interstate waters of the state so as to cause any nuisance conditions, such as the presence of significant amounts of floating solids, scum, oil slicks, excessive suspended solids, material discoloration, obnoxious odors, gas ebullition, deleterious sludge deposits, undesirable slimes or fungus growths, or other offensive or harmful effects.[113]

"Other wastes" include oil and chemicals as well as chemical wastes.[114] Violation of any effluent guideline or water quality standard subjects the discharger to a civil penalty.[115] Dischargers also have a duty to notify the state of any spill and to take steps to minimize the damage.[116] Because the impact of spills may be cumulative,[117] it is reasonable to expect the courts to classify a spill of any consequence as a nuisance within the meaning of the statute. Should the state proceed on the theory that a spill violates the interstate standards, which include oil standards, liability may be imposed on the basis of sections six

112. MINN. STAT. § 115.01(5) (1976).

113. Minn. P.C.A. Criteria for the Classification of the Interstate Waters of the State and the Establishment of Standards of Quality and Purity, 14 Minn. Reg. W.P.C. 15(c)(2) (1974) [hereinafter cited as Minn. P.C.A. Criteria]. For interstate waters denominated Class A for purposes of recreation and commercial fishing, concentrations of oil are limited to 0.5 milligrams per litre. *Id.* 15(d)(2).

114. MINN. STAT. § 115.01(4) (1976). Wisconsin has enacted similar legislation. WIS. STAT. ANN. § 147.015(3) (West 1974).

115. The statute authorizes a maximum fine of $10,000 per day, plus compensation to the state for costs of cleanup and damage to flora and fauna. MINN. STAT. § 115.071(3) (1976).

116. *Id.* § 115.061.

117. *See* note 6 *supra.*

and seven of the interstate criteria, which manifest a non-degradation policy.[118]

Port facilities may also be subject to regulation through legislation such as Wisconsin's Pollution Discharge Elimination System, which prescribes maximum discharges of oil.[119] The proposed maximum discharge concentration for the Lakehead terminal in Superior, Wisconsin, for example, is 10 milligrams per liter.[120]

While such general pollution legislation may be useful in dealing with small-scale spills, it does not adequately deal with several other aspects of the oil pollution problem. The Minnesota regulations fail, for example, to provide for measures such as comprehensive storage and transfer facility licensing, which would reduce the chances of a major spill occurring. Moreover, there are no rules governing recovery of clean-up costs, or compensation for damages to state and private parties caused by the spills.

C. Specific Legislation Relating to Vessel Pollution

In addition to general water pollution control legislation, the Great Lakes states have a variety of miscellaneous statutes directed specifically at vessel pollution. For example, the Michigan Water Resources Act provides:

> (1) A person owning, operating or otherwise concerned in the operation, navigation, or management of a watercraft operating on the waters of this state shall not discharge or permit the discharge of oil or oily wastes from the watercraft into or onto the waters of this state if the oil or oil wastes threaten to pollute or contribute to the pollution of the waters or adjoining shorelines or beaches.

---

118. Minn. P.C.A. Criteria, *supra* note 113, at 15(a)(6), (7).

Although no case applying these and related provisions has reached the Minnesota courts, the statute and the intrastate and interstate quality criteria formed the basis for a settlement between the state and a company whose pipeline, over a three-year period, had experienced numerous spills and ruptures at several locations in the state, causing oil discharge into various state waters. The company agreed to conduct extensive tests on large portions of its pipelines, to install new systems on several lines to minimize the risk of rupture due to over-pressuring, to study the sites where oil had been spilled to determine the extent of water pollution, and to pay the state $25,000 for "alleged" damages. Water Quality Stipulation Agreement, *In re* Lakehead Pipeline Co., Inc., (May 20, 1975) (on file at Minnesota Law Review).

119. The legislation creating Wisconsin's Pollution Discharge Elimination System is 1973 Wis. Laws c. 74 § 3, *amended* 1975 Wis. Laws c. 206, c. 349 (as codified Wis. Stat. Ann. §§ 147.02-.23 (West 1974)).

120. Draft Environmental Impact Statement, *supra* note 21, at 64.

> (2) The owner or operator of any watercraft who, whether directly or through any person concerned in the operation, navigation or management of the watercraft, discharges or permits or causes or contributes to the discharge of oil or oily wastes into or onto the waters of this state or adjoining shorelines or beaches shall immediately remove the oil or oily wastes . . . . If the state removes the oil or oily wastes which were discharged by an owner or operator, the watercraft and the owner or operator are liable to the state for the full amount of the costs reasonably incurred for its removal. The state may bring action against the owner or operator to recover such costs in any court of competent jurisdiction.[121]

The obvious purpose of the damage provision is to allow the state to control small craft spills and to recover clean-up costs. Despite broad prohibitions against the discharge of oil, however, state statutes not integrated with the liability limitations of section 311 of the FWPCA[122] were not written with the legal problems of large vessel pollution in mind.

D. State Spill Prevention and Recovery Legislation

Since 1970 many coastal states have enacted special legislation to deal with spills.[123] Although the statutes vary, they generally have three primary objectives—the prevention of ship-to-shore spills, the recovery of clean-up costs, and the compensation of those injured as the result of a spill. To prevent spills resulting from ship-to-shore transfers, states generally license oil reception facilities so that conditions designed to protect the environment may be imposed on their operation. Clean-up costs and damages are recovered through statutes which impose strict liability. Further, fiscal responsibility requirements are imposed on tanker owners and terminal operators. Some states have gone further and have created a fund—sometimes fed only by penalty recoveries and sometimes by oil transfer taxes—to supplement the amount of money available for cleanup and damage awards

---

121. Mich. Comp. Laws Ann. § 323.337 (1975). Wisconsin's oil discharge prohibition is found at Wis. Stat. Ann. § 29.29(3) (West 1973).

122. *See* text accompanying notes 51-60 *supra.*

123. Alaska Stat. § 46.03.740 *et seq.* (1971), § 46.03.822 *et seq.* (Supp. 1975); Fla. Stat. Ann. § 376.011 *et seq.* (Supp. 1976); Me. Rev. Stat. Ann. tit. 38, § 541 *et seq.* (Supp. 1973); Md. Ann. Code, Nat. Res. § 8-1406 *et seq.* (1974); Mass. Gen. Laws Ann. ch. 21, § 50 *et seq.* (1973), § 26 *et seq.* (Supp. 1974); N.J. Stat. Ann. § 58:10-23.3 *et seq.* (Supp. 1976); N.Y.E.C.L. §§ 17-1743, 71-1941, 71-1943 (Supp. 1975); N.C. Gen. Stat. § 143-215.77 *et seq.* (Supp. 1975); Ore. Rev. Stat. § 468.780 *et seq.* (1975); Wash. Rev. Code Ann. § 90.48.315 *et seq.* (Supp. 1975).

beyond the amounts recoverable from those responsible for a spill.[124]

The Great Lakes states may wish to follow the example of the states bordering the oceans or the Gulf of Mexico and enact similar spill recovery laws, but several major issues must be faced before they do so. First, legislatures must make a basic policy judgment as to whether strict liability, the standard adopted by the coastal states' legislation, is the appropriate standard for the vessels plying the Great Lakes and for the terminal facilities that are likely to be built there. Second, legislatures should be aware of what common law remedies are already available to provide for spill damage recovery and what deficiencies in these traditional remedies might be corrected by new legislation. Third, the enactment of new legislation in this area may raise significant constitutional questions; the experiences of the coastal states in meeting challenges to the constitutionality of their spill recovery legislation may be instructive for legislatures considering such enactments and may illuminate the permissible scope of state power.[125]

1. *Strict Liability*

The three familiar standards of liability for the recovery of damages at common law are: (1) the intentional infliction of harm; (2) the infliction of harm by conduct which is negligent, that is, where the actor is at fault; and (3) strict and absolute liability, that is, where the actor causes harm without being at fault. Strict liability is subject to defenses such as acts of God, whereas absolute liability allows no such defenses. Although common law liability standards have long been supplemented by legislatively and administratively imposed standards of conduct,[126] consideration of traditional standards remains essential to analyzing the effectiveness of current regulatory efforts.

As a general matter, liability for the intentional infliction of harm is easily justified. In comparison with the losses inflicted, an activity which intentionally harms another generally has little social utility. In the case of oil and hazardous substances trans-

124. *See* notes 139-154 *infra* and accompanying text. Because of the limited amount of oil and other hazardous substances transported on Lake Superior, *see* note 3 *supra*, creation of a fund by Michigan, Minnesota, or Wisconsin, is probably not justified.

125. *See* text accompanying notes 164-207 *infra*.

126. *See, e.g.*, Crowell v. Benson, 285 U.S. 22 (1932).

portation, however, this generalization is not wholly correct; intentional discharges are often made for the safety of the ship and the crew. But questions of privilege aside, intentional discharges of oil should be subject to liability.

Liability for the negligent infliction of harm is based on fault.[127] Whether an actor should be subject to liability for negligent conduct which injures another is determined by making a post hoc judgment about the probability of the activity causing injury, the gravity of the injury, and whether the burden of imposing adequate preventive measures is economically justifiable.[128] "Under the prevailing theory, unreasonably dangerous conduct is negligence without any requirement that it be accompanied by any particular state of mind."[129] In short, the standards are objective and represent a complex set of policy judgments about loss allocation. In contradistinction to strict liability, under a negligence theory an actor can, by convincing a judge or jury that his conduct was reasonable in light of prevailing community or industry standards, avoid liability for injury.[130] Moreover, defenses such as contributory negligence and assumption of risk are available.[131]

In principle, negligence theory provides an adequate basis for public and private recoveries for damages caused by pollution, but it is generally agreed that reliance on common law negligence would allow many injuries to go uncompensated. There is, first, the practical problem common to all theories of liability of identifying the source of harm, in this case, pollution. If jurisdiction over a vessel is obtained, the plaintiff in a negligence suit must prove negligent discharge, a difficult task in light of the plaintiff's limited access to information. "A shore-bound claimant usually cannot prove negligent seamanship of the vessel's crew or officers, since he has no friendly witnesses from the tanker. . . . It is indeed seldom [that] the plaintiff [is] able to prove unseaworthiness from faulty ship construction, especially since most tankers are built abroad."[132] For these reasons most

127. *See* W. PROSSER, HANDBOOK OF THE LAW OF TORTS § 31, at 147 (4th ed. 1971).
128. *Id.* § 43, at 266.
129. 2 F. HARPER & F. JAMES, THE LAW OF TORTS § 16.1, at 897 (1956).
130. *Id.* § 16.2, at 902-03.
131. *Id.* §§ 21.1, at 1162-68; 22.1, at 1193-1209.
132. Wood, *An Integrated International and Domestic Approach to Civil Liability for Vessel-Source Oil Pollution*, 7 J. MARITIME L. & COM. 1, 4 (1975).

experts on oil pollution have urged that dischargers be held liable without fault.[133]

The common law has long imposed liability on certain classes of activities that cause harm regardless of whether an actor was negligent. Scholars have long debated whether courts were simply classifying certain risks as unreasonable per se, that is, negligent, or deciding that certain activities, although reasonable under a negligence standard, should nonetheless be viewed as posing such a high degree of danger that the actor should bear the costs of certain injuries as the price of the undertaking. The debate is still unresolved, and the justification for strict liability remains controversial despite its increasingly widespread acceptance. Some now support it on the ground that it distributes the burden of losses fairly, while others support it on the ground of efficiency, arguing that it will force actors to take extra precautions or modify processes to avoid accidents.[134] The most satisfactory rationale for strict liability is that it can promote efficient allocation of resources. Professors Calabresi and Hirschoff argue that the imposition of liability regardless of fault places the costs of accidents on those in the best position to make a benefit-cost analysis between accident costs and accident-avoidance costs and to act on that decision.[135] Under this theory either courts may make ad hoc liability assignments or legislatures may make categorical judgments.[136] The strength of the Calabresi-Hirschoff standard of liability, which is derived in large part from neo-classical welfare economics,[137] is that the standard if properly applied will promote efficiency by minimizing the sum of accident costs and accident-avoidance costs.[138]

Strict liability for supertankers is easy to justify.[139] Supertankers present great risks to the environment because they use new and unproven technologies and the rapid implementation of these new technologies exaggerates the potential for human

133. *See* Bergman, *No Fault Liability for Oil Pollution Damage*, 5 J. MARITIME L. & COM. (1973) and authorities cited therein.

134. The argument that strict liability promotes safety precautions has been disputed. *See* R. POSNER, ECONOMIC ANALYSIS OF LAW 92-95 (1972).

135. Calabresi & Hirschoff, *Toward a Test For Strict Liability in Tort*, 81 YALE L.J. 1055 (1972).

136. *See id.* at 1067-70.

137. *Id.* at 1076-84.

138. *Id.* at 1076.

139. *See generally* Bergman, *supra* note 133.

error.[140] The operation of these vessels may legitimately be classified as an ultrahazardous activity. Because of their presumed utility, however, supertankers have not been banned from the seas. Permitting tankers to operate while forcing them to bear the full costs of their operation, including the cost of damages caused by spills, may determine whether the supertankers are in fact efficient.[141]

The case for strict liability for smaller ships and shore facilities, although not as strong, is justifiable under the Calabresi-Hirschoff standard. First, because spills do not occur with great frequency, individual shoreland owners are unlikely to maintain prevention equipment and chemicals or to purchase insurance. On the other hand, insurance is readily available to the marine transportation industry. Second, when a spill occurs, prevention of loss is best accomplished through collective action. Individual property owners would incur high transaction costs in organizing ad hoc clean-up programs. Third, it would be neither reasonable nor efficient to force shoreland owners to avoid spill damage by locating their activities elsewhere. These factors suggest that a cost-benefit analysis should be made at a high level of generality. Spill victims are unable reasonably to take steps to avoid the damage and are not in a good position to make a benefit-cost analysis of risks and preventive measures. Thus, legislatures might reasonably conclude that tanker owners and operators should be strictly liable for spill damages because they can most cheaply meet the costs of avoiding spills. Strict liability, then, does appear to be a justifiable and appropriate standard for the vessels and facilities on the Great Lakes.

2. *Common Law Remedies*

In addition to strengthening plaintiffs' chances of recovery by substituting a strict liability standard for the common law negligence standard, new legislation might correct other deficiencies in traditional common law remedies, where such deficiencies exist. A plaintiff who suffers an injury to a legally protected interest as a result of a spill can recover damages either under

140. Supertankers grew "too big much too quickly, without commensurate knowledge of the forces created by their enormous hulls." N. MOSTERT, SUPERSHIP 76 (1974).

141. Although there are significant differences between them, the arguments made on behalf of strict liability for the SST can be applied to supertankers. *See* Baxter, *The SST: From Watts to Harlem in Two Hours*, 21 STAN. L. REV. 1 (1968).

state law or in admiralty,[142] but both state law and admiralty traditionally have not allowed compensation for the *full* range of interests actually injured. Thus, although courts have broadened the scope of recoverable damages in recent years[143] and in some areas the common law does provide an adequate basis for relief, new legislation may be needed to expand the common law calculus of legally protected interests. Such an expanded range of legally protected interests would not only permit plaintiffs to recover for more of their damages, but would also act as a deterrent to polluters. This deterrent factor is important in light of the limited availability of injunctive relief in pollution cases; since equity requires a showing of imminent irreparable injury, courts are reluctant to enjoin potentially polluting activities before any actual damage has occurred.[144]

a. Property Damage

Property damages caused by a spill have always been recoverable at common law. Private owners of littoral and riparian property have recovered for injuries to beaches, piers, and

142. Negligent oil pollution of navigable waters can constitute a maritime tort. *See* California, Dep't of Fish & Game v. S.S. Bournemouth, 307 F. Supp. 922 (C.D. Cal. 1969). Traditionally, admiralty jurisdiction has attached if the injury takes place on navigable waters, but in Executive Jet Aviation, Inc. v. Cleveland, 409 U.S. 249 (1972), the Supreme Court added a second test to the locality standard. In *Executive Jet* the Court denied admiralty jurisdiction in a case involving a jet that crashed into Lake Erie after striking a flock of seagulls. The reason given was that the wrong occurring on navigable waters must also bear a significant relationship to a traditional maritime activity before admiralty jurisdiction attaches. Over-the-water spill liability is not affected by *Executive Jet*; liability for ship-to-shore and onshore spills from navigation-related facilities should be similarly unaffected. *See* Note, *Private Actions for Damages Resulting from Offshore Oil Pollution*, 2 COLUM. J. ENVIR. L. 140, 143-46 (1975). *See generally* Bridwell & Whihen, *Admiralty Jurisdiction: The Outlook for the Doctrine of Executive Jet*, 1974 DUKE L.J. 757. Damages actions, of course, are subject to the Limitation of Liability Act, 46 U.S.C. §§ 181-89 (1970), discussed at text accompanying notes 61-64 *supra*.

143. *See* notes 151-53 *infra* and accompanying text.

144. For a good collection and analysis of the cases on this point, see Comment, *Projected Environmental Harm: Judicial Acceptance of a Concept of Uncertain Risk*, 53 J. URBAN L. 497 (1976). For a good discussion of this doctrine in the environmental context, see Note *Imminent Irreparable Injury: A Need For Reform*, 45 So. CAL. L. REV. 1025 (1972). Courts prefer to base relaxation of the traditional standards of proof on some statutory authority. *See* Opal Lake Ass'n v. Michaywe Limited Partnership, 47 Mich. App. 354, 209 N.W.2d 478 (1973), which adopted a "tipping point" analysis to enjoin a proposed lakeshore resort complex. More significantly, in the final opinion on the merits of the Reserve

marinas;[145] a state may recover damages for injuries to lands, such as state parks, which it holds in a proprietary capacity.[146] Polluters often defend against these damage actions, however, on the ground that the polluting activity constitutes a public rather than a private nuisance, and thus a private party cannot recover for injuries suffered by the public generally.[147] Plaintiffs who suffer special damages, however, may avoid this defense and riparian and littoral property owners have often been given standing to sue for property damage.[148] New legislation might expand plaintiffs' legally protected interests by liberalizing the standing requirements and minimizing the distinction between special and general damages.[149]

b. Economic Losses

Common law has traditionally denied recovery for negligently caused economic losses, such as lost profits.[150] Fishermen have occasionally been permitted to recover for such losses,[151]

Mining litigation the Eighth Circuit construed the use of the term "endangering" in section 1160(g)(1) of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1251 *et seq.* (Supp. V 1975), to require "a lesser risk of harm than the phrase 'imminent and substantial endangerment to persons.'" Reserve Mining Co. v. Environmental Protection Agency, 514 F.2d 492, 528 (8th Cir. 1975). The court's construction is less a true reconstruction of legislative intent than it is a judicial adoption of a risk-benefit analysis. *See* Note, *Reserve Mining—The Standard of Proof Required to Enjoin an Environmental Hazard to Public Health*, 59 MINN. L. REV. 892 (1975). The *Reserve Mining* decision is the first time a court has adopted a risk-benefit analysis in a suit *not* involving review of administrative agency action. *See, e.g.*, Amoco Oil Co. v. Environmental Protection Agency, 501 F.2d 722 (D.C. Cir. 1974).

145. *See* cases cited in Wood, *Requiring Polluters to Pay For Aquatic Natural Resources Destroyed by Oil Pollution*, 8 NAT. RES. LAW. 545, 574 (1975).

146. Maine v. M/V Tamano, 357 F. Supp. 1097 (D. Me. 1973).

147. In Oppen v. Aetna Ins. Co., 485 F.2d 252 (9th Cir. 1973), the court denied recovery for the loss of use of pleasure craft as a result of the Santa Barbara oil spill on the theory that since the spill interfered only with the public right of navigation, no special damage had been shown.

148. *See* Wood, *supra* note 145, at 583-87. Special damages are those that can be "distinguished from [those] sustained by other members of the public." W. PROSSER, HANDBOOK OF THE LAW OF TORTS § 88, at 586 (4th ed. 1971); *see* note 152 *infra*.

149. Although proposed federal liability fund legislation is not clear, the distinction between special and general damages seems to be incorporated into proposed definitions of recoverable damages. *See* Wood, *supra* note 145, at 576-78.

150. *See* Note, *Negligent Interference with Economic Expectancy: The Case for Recovery*, 16 STAN. L. REV. 664 (1964).

151. *See, e.g.*, Burgess v. M/V Tamano, 370 F. Supp. 247 (D. Me. 1973).

but courts have, nonetheless, generally denied recovery for negligent interference with a prospective advantage such as a future catch. An important precedent for recovery of future profits was set by the Ninth Circuit in a case arising out of the Santa Barbara offshore drilling oil spill. In *Union Oil Co. v. Oppen*[152] the court held that fishermen could recover for anticipated profits lost when fish were destroyed by the spill. *Oppen* is based on the principle that those engaged in offshore drilling have a duty to commercial fishermen to conduct their operations in a reasonably prudent manner so as to avoid negligent destruction of aquatic life. According to this reasoning, losses caused to commercial fishermen were a foreseeable result of the company's negligence. The logic of the case applies equally as well to losses suffered by commercial fishermen as the result of a spill from a tanker or other sources. Although other courts have reached results similar to *Oppen* with respect to fishermen, they have arbitrarily refused to extend this protection to those off the shore, such as resort owners, who lose potential profits as a result of the spill.[153] These losses, unlike losses suffered by fishermen, are said to be common to the entire community, and thus not recoverable. New state legislation could extend the kind of protection afforded by *Oppen* and permit recovery for economic losses by a wider group of injured parties.[154]

c. Recovery by the State for Injuries to Fish and Wildlife

Expanding common law theory does seem to provide an adequate basis for relief in pollution cases where the state itself sues for damages for injuries to fish and wildlife. Even under tradi-

152. 501 F.2d 558 (9th Cir. 1974), discussed in 88 HARV. L. REV. 444, 446-47 (1974); Comment, *Union Oil Co. v. Oppen: Recovery of a Purely Economic Loss in Negligence*, 60 IOWA L. REV. 315 (1974). Besides recognizing a right to recover for the negligent interference with prospective advantage, *Oppen* is significant because it permitted recovery by commercial fishermen using waters held in trust by the state. Such plaintiffs may often face the argument that they lack standing to sue. If the right to fish is a public right enjoyable by all citizens, commercial fishermen lack an individual property right. Therefore, to obtain relief for an invasion of a public right, fishermen must prove special damages—damages different in kind, not simply in degree, from that sustained by the public generally. Recent cases have rationalized recovery on the ground that commercial fishermen have the requisite special interests because they suffer a distinct pecuniary loss. For a collection of authorities, see Burgess v. M/V Tamano, 370 F. Supp. 247 (D. Me. 1973).

153. For a well reasoned critique of the denial of recovery to such plaintiffs, see Wood, *supra* note 145, at 578-80 and cases cited therein.

154. Pending federal legislation would allow recovery for economic

tional doctrine the state could clearly recover as a property owner for damages to interests held in its proprietary capacity. Traditional doctrine also held, however, that since the state lacked possessory title to fish and wildlife, it did not own them in a proprietary capacity; rather, as sovereign, it held them in trust for the public.[155] In at least two states, this lack of possessory title has been a basis for denying the state recovery for a fish kill.[156] This reasoning derives from an era when encouragement of private ownership was thought to be the only proper public resource policy and there was fear that the state would claim resources at the expense of private citizens if state proprietary claims were recognized.[157] The evolving modern view is that state proprietary interests in common property resources are valuable as a way to recognize a public right of use,[158] and this theory provides the littoral states a basis upon which to seek damage recoveries.

Lake Superior's fish and wildlife clearly are a common property resource to be protected in the public interest. Private parties may acquire possessory rights in these resources, but this does not preclude the recognition of a state proprietary interest in the same resources. Moreover, as private citizens are often denied standing to sue for injuries to such resources, the state is the appropriate body to protect the public interest through damage actions. Thus, the state should be allowed to sue as *parens patriae* to recover damages when all state citizens are injured by a spill causing harm to waters and marine life. The action would be based on either the state's sovereign or proprietary interests in the natural resources.[160]

losses. National Oil Pollution Liability and Compensation Act of 1975, S. 1754, 94th Cong., 1st Sess., §§ 2-3, 121 CONG. REC. 8278, 8279 (1975). For an argument that the scope of liability for economic losses should only be expanded at the legislative level, see Henderson, *Expanding the Negligence Concept: Retreat from the Rule of Law*, 51 IND. L.J. 467, 520-21 (1976).

155. *See* notes 101-05 *supra* and accompanying text.

156. State v. Dickenson Cheese Co., 200 N.W.2d 59 (N.D. 1972); Commonwealth v. Agway, 210 Pa. Super. 150, 232 A.2d 69 (1967). *See also* State v. New Jersey Central Power & Light Co., 69 N.J. 102, 351 A.2d 337 (1976) (operator of power generating plant licensed by Atomic Energy Commission not liable because of federal preemption).

157. *See* Geer v. Connecticut, 161 U.S. 519, 539-42 (1896) (Field, J., dissenting).

158. *See* J. SAX, WATER LAW, PLANNING & POLICY 291-98 (1965).

159. *See* Wood, *supra* note 145, at 585-87.

160. *See* Maryland Dep't of Natural Resources v. Amerada Hess Corp., 350 F. Supp. 1060, 1065-67 (D. Md. 1972). It is often alleged that the Supreme Court has rejected the state ownership theory, and thus there is no basis for recovery of damages by the state. The alleged rejec-

This expanded notion of the state's standing to sue as *parens patriae* was recently adopted in *Maine v. M/V Tamano*,[161] in which the state of Maine sued a vessel, its owners, and others for damages to water and marine life caused by an accidental discharge of 100,000 gallons of oil into Casco Bay. The court noted that the state's right to sue was not limited to those cases in which it sought to protect its proprietary interests, but that it could also sue to protect its "quasi-sovereign" interests. The court also indicated a willingness, not previously displayed by the courts, to allow a damage action. The two most substantial arguments in favor of denying state *parens patriae* suits have been that such actions expose the discharger to a risk of double liability and that the state's interest is too speculative to be reduced to damages. In *M/V Tamano*, the court characterized both these arguments as

tion came in a 1948 decision, part of a long line of cases holding that a state can not discriminate against nonresidents in allowing access to its natural resources. In Toomer v. Witsell, 334 U.S. 385 (1948), the Court found that a series of South Carolina statutes designed to give in-state shrimp fishermen and handlers advantages over out-of-state fishermen constituted an undue burden on interstate commerce. On this point *Toomer* was correct, for the Court was unable to find a valid conservation purpose, the basis of a legitimate state interest, behind the South Carolina legislation. Rejection of the ownership theory was not necessary to the decision, but the state had defended its preference scheme, in part, on the theory that it owned the shrimp. Chief Justice Vinson, in rejecting this argument, wrote: "The whole ownership theory, in fact, is now generally regarded as but a fiction expressive in legal shorthand of the importance to the people that a State have power to preserve and regulate the exploitation of an important resource." *Id.* at 402. If "preserve and regulate" implies the power to recover damages for lost resources, then Chief Justice Vinson's statement is unobjectionable. If, however, the statement means that a state's power is confined to conservation measures limiting private exploitation, it is wrong. Most recent cases have construed the majority opinion in *Toomer* in conformity with the concurring opinion of Justice Frankfurter, who wrote: "A state may care for its own in utilizing the bounties of nature within its borders because it has technical ownership of bounties or, when ownership is in no one, because the State may for the common good exercise all the authority that technical ownership ordinarily confers." *Id.* at 408. *See* Maine v. M/V Tamano, 357 F. Supp. 1097 (D. Me. 1973). In *Amerada Hess* the court rested state recovery of damages on the theory that since the state was a trustee it could sue to protect the corpus of the trust. Analogies to the private law of trusts are imperfect, and Justice Frankfurter's concurrence contains a simpler and more satisfactory rationale. The state should be able to recover damages for losses to fish and wildlife not yet captured by private parties since there is no one else with standing to sue. For a discussion of the constitutional problem of state regulation of natural resources, see Power, *More About Oysters Than You Wanted To Know*, 30 MD. L. REV. 199, 216-23 (1970).

161. 357 F. Supp. 1097 (D. Me. 1973). *See generally* Note, *State Protection of the Economy and Environment: Parens Patriae Suits For Damages*, 6 COLUM. J.L. & SOC. PROB. 411 (1970).

"problems of proof" and neatly suggested that the double recovery problem could be solved by excluding from the state's recovery any monetary damages recovered by private citizens.[162]

3. *Constitutional Limitations on State Legislation*

Enactment of legislation similar to the statutes adopted by some of the coastal states[163] may raise a host of constitutional questions. The most important constitutional issue that arises is whether federal law has preempted the state's power to enact such provisions; the FWPCA authorizes states to enact and enforce legislation respecting discharge of pollutants[164] but does not otherwise define the reach of state power. In addition to preemption issues, equal protection and due process claims may arise. The spill-recovery laws of both Florida and Maine have been challenged on a number of constitutional grounds[165] and the resulting case law both delineates the permissible scope of state power and illustrates some of the constitutional difficulties such legislation may pose. Finally, it should be noted that future federal legislation may, by express preemption, moot the issue of what type of state post-discharge cost-recovery legislation may be enacted.

a. Florida: *Askew v. American Waterways Operators*

In 1970 Florida passed the Pollution Spill Prevention Act[166] which may serve as a model for other states considering legislation to supplement the FWPCA. The Florida Act covers both oil and other hazardous substances. The provisions of most interest as a guide for similar legislation include: (1) terminal facilities are required to be licensed to insure their ability to transfer oil and other substances in a manner designed to prevent accidental discharges;[167] (2) money from such sources as damages recovered for cleanup is placed in the Florida Coastal Protection Trust Fund, and more importantly, the fund will be fed by a tax of two cents per barrel on the transfer of oil until the

162. 357 F. Supp. at 1101-02.
163. *See* notes 123-25 *supra* and accompanying text.
164. 33 U.S.C. § 1370 (Supp. V 1975).
165. *See* notes 166-207 *infra* and accompanying text.
166. 1970 FLA. LAWS ch. 70-244, *as amended*, FLA. STAT. ANN. §§ 376.011-.21 (Supp. 1976).
167. FLA. STAT. ANN. § 376.06 (Supp. 1976). For similar legislation, see CONN. GEN. STAT. REV. § 25-54cc (1975); MD. ANN. CODE, NAT. RES.

balance of the fund exceeds $35,000,000;[168] and (3) absolute liability is imposed for damages not recoverable under the FWPCA.[169]

Section 12 of the 1973 version of the statute survived a constitutional challenge in *Askew v. American Waterways Operators, Inc.*[170] The contested statute provided:

> Because it is the intent of this chapter to provide the means for rapid and effective cleanup and to minimize damages, any licensee and its agents or servants, including vessels destined for or leaving a licensee's terminal facility, who permits or suffers a prohibited discharge or other polluting condition to take place within state boundaries shall be liable to the state for all costs of cleanup or other damage incurred by the state and for damages resulting from injury to others. In any suit to enforce claims of the state under this chapter, it shall not be necessary for the state to plead or prove negligence in any form or manner on the part of the licensee or any vessel. If the state is damaged by a discharge prohibited by this chapter it need only plead and prove the fact of the prohibited discharge or other polluting condition and that it occurred. In addition to the civil penalty, the pilot and the master of any vessel or person in charge of any licensee's terminal facility who fails to give immediate notification of a discharge to the port manager and the nearest coast guard station shall be guilty of a felony of the third degree, punishable as provided in § 775.082, § 775.083, or § 775.084. The department shall, by rules and regulations, require that the licensee designate a person at the terminal facility who shall be the person in charge of that facility for the purposes specified by this section.[171]

Plaintiffs sought a declaration that the statute was unconstitutional, arguing that the comprehensiveness of federal legislation and admiralty jurisdiction precluded state court adjudication of oil and hazardous spill damage actions. Justice Douglas, writing for a unanimous Court, upheld the constitutionality of the Florida

§ 8-1411 (Supp. 1975); MASS. GEN. LAWS ANN. ch. 21, § 50 (1973); N.C. GEN. STAT. §§ 143-215.100-.101 (Supp. 1975).

168. FLA. STAT. ANN. § 376.11 (Supp. 1976). The section has provisions for eliminating the two cents per barrel levy if the fund equals or exceeds $35,000,000; to reinstate it if the fund falls below $30,000,000; and to raise the tax to ten cents per barrel to replenish the fund if it is depleted by a disaster of "catastrophic proportions." In many other states funds are fed only by the clean-up costs and penalties recovered by the state, *see, e.g.*, MD. ANN. CODE, NAT. RES. § 8-1411(f) (Supp. 1975); N.C. GEN. STAT. § 143-215.87 (Supp. 1975); WASH. ANN. REV. CODE § 90.48.390 (Supp. 1975).

169. FLA. STAT. ANN. § 376.12 (Supp. 1976).

170. 411 U.S. 325 (1972). For a useful discussion of the case, see G. GILMORE & C. BLACK, *supra* note 64, at 830-34. For a discussion of the district court's decision, see Swan, *Challenges to Federalism: State Law Concerning Marine Oil Pollution*, 2 ECOLOGY L.Q. 437 (1972).

171. 1971 FLA. LAWS ch. 71-136, § 326, *as amended*, FLA. STAT. ANN. § 376.12 (Supp. 1976).

statute, but carefully limited the holding to one of general constitutionality, leaving many important issues unanswered. The comprehensiveness argument was rejected because section 12 of the Florida statute allowed the state to recover two classes of damages not recoverable under section 311's limitation of liability provisions:[172] the state's clean-up costs and damage to property and the ecology of the state's waters.[173] Thus, the Court concluded that the two Acts were harmonious, at least in their broad outline. A second and more specific preemption argument was that section 12 was inconsistent with the Federal Limitation of Liability Act of 1851[174] and section 311's limitation of liability provisions. Justice Douglas observed that the Court need not reach the question of whether Florida could recover costs in excess of those specified in the federal Act, and held "that there is room for state action in cleaning up the waters of a State and for recouping, *at least within federal limits*, so far as vessels are concerned, her costs."[175] This analysis does suggest, however, that state legislation which exceeds the federal liability limits may be preempted. The third preemption argument was that even if there were no specific conflict with a federal statute, the policies behind the constitutional grant of admiralty jurisdiction required exclusive federal adjudication of the issues. The defendants cited several old precedents for the sweeping proposition that because matters of interstate and international concern were at stake, maritime law must be uniform.[176] These precedents had been gradually cut back, however, and a standard similar to that employed in nonadmiralty preemption cases had evolved: state legislation is constitutional provided it does not specifically contravene any acts of Congress or interfere with maritime policy. In short, as Justice Douglas put it, "[e]ven though Congress has acted in the admiralty area, state regulation is permissible, absent clear conflict with the federal law."[177] The Court held that state power to control sea-to-shore pollution was therefore not

---

172. 33 U.S.C. 1321(b)(iii) (Supp. V 1975).

173. The current statute does not provide for recovery for damage to the state's ecology. FLA. STAT. ANN. § 376.12 (Supp. 1976).

174. 46 U.S.C. § 181 *et seq.* (1970).

175. 411 U.S. at 332 (emphasis added).

176. *Id.* at 337-40. For a discussion of the decline of the uniformity doctrine prior to *Askew*, see Scherr, *Admiralty's Power Re Pollution: The Ability of the State to Set More Stringent Penalties Than Those of the Federal Government*, 7 NAT. RES. LAW. 635, 639-42 (1975).

177. 411 U.S. at 341.

divested by admiralty jurisdiction.[178] *Askew* follows an earlier case[179] which suggested that since the primary purpose of maritime policy was to promote navigational safety, state statutes with a different purpose, such as environmental protection, would not be held unconstitutional unless they frustrated the federal policy. *Askew* is, then, a firm precedent for state control of oil and hazardous substance spills and state regulation of ports and vessels in the interest of spill prevention, at least within the limitations of federal law.[180]

178. Liability for damages to persons or property on shore caused by a vessel on navigable waters is within the admiralty jurisdiction of the federal courts. Admiralty Extension Act, 46 U.S.C. § 740 (1970). See Comment, *Federal Maritime Jurisdiction and State Marine Pollution Legislation: The Florida Act Not Preempted Per Se*, 28 U. MIAMI L. REV. 209, 214-15 (1973), for a discussion of the Court's construction of the Act.

179. Huron Portland Cement Co. v. Detroit, 362 U.S. 440 (1960). In *Huron*, soot discharges from an old fashioned boiler violated a city smoke control ordinance. A shipowner challenged the ordinance on the grounds that compliance constituted a burden on interstate commerce and that a federal law, the Steamboat Inspection Act, 46 U.S.C. § 361 *et seq.* (1970), which provided for boiler inspections by the Coast Guard, preempted any local air pollution control ordinances. The preemption argument was rejected on the ground that the two acts had different purposes; the federal act was concerned only with shipboard safety, and thus supplemental municipal environmental legislation did not conflict with any federal policy. The Court pointed out that the local legislation was in fact consistent with the objectives of federal air pollution abatement legislation. *See also* Kelly v. Washington, 302 U.S. 1 (1937).

180. Preventive regulations such as vessel construction and operation procedures, however, may well be preempted. State authority to mandate specialized shipboard equipment and pilotage rules would seem to be circumscribed by Burbank v. Lockhead Air Terminal, 411 U.S. 624 (1973), which held that the federal government had preempted local airport noise control, and on that basis invalidated the Burbank airport's prohibition of nightime jet takeoffs. Because ports often serve interstate rather than purely local needs, *Burbank* is a strong precedent for federal preemption of state attempts to prescribe preventive equipment or manning requirements which differ from those permitted by the Coast Guard. State fiscal responsibility requirements would also appear to be preempted, *see* Swan, *American Waterways: Florida Oil Pollution Legislation Makes It Over First Hurdle*, 5 J. MARITIME L. & COM. 77, 109 (1973), but the Supreme Court nonetheless upheld them in *Askew* without citation of authority or analysis. Since the Torrey Canyon disaster, international conventions have attempted to prevent spills by requiring signatory states to promulgate design and operation regulations. In the United States these are promulgated at the federal level. With respect to port approach routes, standards of maneuverability, and structure design and operation, a leading commentator has concluded, "considerations of the reciprocal burdens on United States-flagships using foreign waters, the relationships to existing treaty obligations, the impact on foreign trade . . . and the general tenets of international law suggest that preventative regulation would be most properly handled at the federal level." Swan, *supra*, at 91.

Although *Askew* left the precise boundaries of state power undefined, it is clear that courts may not simply presume that regulation of maritime-related activities requires a uniform federal scheme; rather, a more searching inquiry similar to that demanded by the commerce clause preemption cases must be made. In a commerce clause case a court must find that the specific state regulation at issue unreasonably burdens interstate commerce;[181] analogously, in an admiralty preemption case, a court must find that the particular state regulation undermines federal maritime policy. *Askew* appears to place state regulation of terminal and transfer facilities, as well as state regulation of port-discharge clean-up costs, on a firm basis, at least until a clear federal port location and operation policy emerges.[182]

Many of the hard preemption issues raised by *Askew* were eliminated in 1974 when the Florida legislature amended section 12 to bring it in line with the FWPCA. Tanker owners are now liable only for clean-up costs up to $14,000,000 and shore facility operators are liable up to $8,000,000.[183] The post-spill recovery damages for which the state may recover, however, are still broader than those recoverable under the federal act.[184] "In addition to the foregoing costs of cleanup, terminal facilities shall be liable to the fund for all damages in accordance with the terms of subsections (2), (3) and (4) and § 376.11(6)."[185] These subsections allow recovery of damage claims by any person. Disagreements must be submitted to a three person arbitration board[186] and the only defenses available to a defendant are

181. *See* text accompanying notes 222-30 *infra.*

182. *See* MARITIME TRANSPORTATION RESEARCH BOARD, COMMISSION ON SOCIOTECHNICAL SYSTEMS, NATIONAL ACADEMY OF SCIENCES, PORT DEVELOPMENT IN THE UNITED STATES (1976).

183. FLA. STAT. ANN. § 376.12(1) (Supp. 1976).

184. Swan, *supra* note 180, at 99-103, discusses possible federal objections to state post-discharge recovery legislation.

185. FLA. STAT. ANN. § 376.12(1) (Supp. 1976).

186. *Id.* § 376.14. Portland Pipe Line Corp. v. Environmental Improvement Comm'n, 307 A.2d 1 (Me.), *appeal dismissed,* 414 U.S. 1035 (1973), upheld Maine's arbitration procedure, which was challenged on the ground that a facility operator was subjected to damages without the benefit of judicial process. Because the panel only determines the damages payable to third parties from the fund, and damages recoverable by the state against facility operators and vessels are determined in a judicial proceeding, no violation of due process was found. 307 A.2d at 14-16. Because the arbitration procedure only determines claims between the fund and third parties, the terminal facility operator's right to a jury trial is not violated. Serious constitutional questions would arise if the arbitration procedure sought to bind terminal facility operators. 307 A.2d at 27-29.

those allowed under the federal act. A damage claimant need not resort to the fund, but may bring a court action in which the discharger will be held to a standard of strict liability, subject to the enumerated defenses applicable in actions against the fund.[187] The original version of the Florida act required evidence of financial responsibility. Although the Supreme Court in *Askew* said, without analysis or citation to authority, that a state requirement of financial responsibility was not preempted, Florida amended its statute in 1974 to prevent a possible conflict. A vessel owner and owner or operator of a terminal facility is now required only to show evidence of fiscal responsibility required by federal laws and administrative regulations.[188]

b. Maine: *Portland Pipeline Corp. v. Environmental Improvement Commission*

In 1969 Maine passed legislation which established a damage fund fed by a one-half cent tax per barrel of oil transported. In addition, they set up an arbitration procedure to process claims against the fund.[189] The most striking feature of the Maine legislation is that terminal facility operators rather than tanker owners are subject to strict liability for their acts and for the acts of vessels using their facilities.[190] In 1975, Maine added a curious amendment which requires all vessels that will be at anchor for more than seven days to obtain a license. License conditions can be set by regulation and include such matters as crew training and emergency contingency plans.[191] Because tankers generally unload within a 24-hour period, however, this statute is unlikely to be applied. Maine also licenses terminal facility operators, while a separate statute provides a procedure for preconstruction review of port sites.[192]

In *Portland Pipeline Corp. v. Environmental Improvement Commission*,[193] the Supreme Court of Maine was faced with a laundry list of constitutional challenges to the legislation. The plaintiffs alleged, *inter alia*, violations of the due process clause, the equal protection clause, the import-export clause, the commerce clause, and the admiralty clause. The court, in a lengthy opinion, upheld the law against each challenge.

187. FLA. STAT. ANN. § 376.205 (Supp. 1976).
188. *Id.* § 376.14.
189. ME. REV. STAT. ANN. tit. 38 § 551 (Supp. 1976).
190. *Id.* § 552 (Supp. 1973).
191. *Id.* § 560 (Supp. 1976).
192. *Id.* §§ 481-88 (Supp. 1973).

The substance of the major due process claim[194] was that the imposition of vicarious liability on terminal operators, where there was no control relationship between the operators and the vessels at fault, was an impermissible denial of due process. The court held, however, that there was no constitutional barrier to the imposition of vicarious liability where it serves a valid purpose[195] and noted that there was, as the Act states, an "adequate opportunity to locate, among the business associates, the primary liability."[196]

The plaintiffs had also alleged that the imposition of strict liability on major terminal facilities, but not on vessels using them, not on those passing through Maine waters, and not on small shore facilities, was a denial of equal protection. The court found no violation of equal protection in these distinctions. It reasoned that the legislature could rationally conclude that terminal facilities posed a greater risk than other oil storage facilities and that vessels not engaged in transferring oil posed less serious risks than those engaged in vessel-to-vessel transfers or vessel-to-shore transfers. The court's analysis of the distinction between terminal facilities and vessels entering and leaving port was less apt, however. The terminal facilities and the vessels using them seem to pose equal risks to the public. But the court reasoned, rather imaginatively, that the vicarious liability provisions made the possibility of a suit against a tanker which spilled leaving or entering a terminal remote, and that the terminal operators could, in effect, impose liability on the vessels themselves through "hold-harmless" provisions.[197] Thus, the court concluded that the statute was not discriminatory, at least on its face.

The plaintiffs' claim that the legislation violated the import-export clause of the Constitution,[198] which prohibits state imposition of import and export taxes, was directed toward the

193. 307 A.2d 1 (Me.), *appeal dismissed,* 414 U.S. 1035 (1973).

194. The plaintiffs also alleged that the statute violated procedural due process, *see* note 186 *supra,* and deprived them of their property, through the state's taxing power, in violation of the due process clause. 307 A.2d at 20-22.

195. The reasonable objective approved by the court was the legislature's conclusion that the most appropriate means of keeping the fund from being depleted was to allow an action for reimbursement against a terminal operator. *Id.* at 22-23.

196. *Id.* at 19.

197. *Id.* at 24.

198. U.S. CONST. art. 1, § 10, cl. 2.

portion of the statute imposing a license fee on the over-water transfer of oil destined for Canada. The Maine court interpreted the Supreme Court precedents on what constitutes an export duty to stand for the proposition that if the fees are imposed on *activities* relating to the goods, rather than on the goods themselves, there is no tax on exports and imports.[199] The Maine scheme could have been upheld on the basis of this rather wooden distinction[200] but the Maine supreme court also analyzed the problem from another more sophisticated perspective: is the tax *burden* on imports or exports? There was no question that the tax was *on* imports-exports, but the court found that the license fee benefited both the state and the fuel industry and therefore there was no burden on the import or export of oil:

> The imposition of these costs is essential to provide services which are in the best interests of plaintiffs. The prompt containment of oil spills will prevent or lessen damages caused by the spill. Such rapid reaction benefits plaintiffs inasmuch as it prevents or decreases their liability. The prompt containment of spills will also prevent disruption of shipping from uncontrolled spills. The Act provides for prompt settlement of damage claims and thereby facilitates amicable relationships between oil carriers and other users of the sea or shoreline. It is also significant that this minimal intrusion into the operation of the licensees has been enacted in lieu of much harsher civil or criminal penalties which might be enacted to control the peril of massive oil spills. These real benefits inherent in the Act totally negative the argument that the license fee is a burden upon imports or exports.[201]

The plaintiffs also invoked the commerce clause to challenge not only the tax discussed above, but the entire regulatory scheme imposed by the legislation. With regard to the tax, the court found that it was not an unreasonable burden on interstate commerce because it was non-discriminatory, reflected a fair approximation of the conduct which gave rise to the danger, and was not excessive compared to the risk of environmental damage.[202] Nor did the regulatory scheme taken as a whole violate the commerce clause, because Congress had not expressly preempted the field, and there was no inherent need for national uniformity in order to prevent inconsistent local regulations.

---

199. *See, e.g.*, Canton R.R. Co. v. Rogan, 340 U.S. 511 (1951).

200. The argument would also apply to the Florida statute. *See* note 168 *supra* and accompanying text.

201. 307 A.2d at 35-36.

202. The tax thus met the standard the Supreme Court enunciated in Evansville-Vanderburgh Airport Authority Dist. v. Delta Airlines, 405 U.S. 707 (1972).

The final issue addressed in *Portland Pipeline* was the *Askew*-type argument that the Maine scheme was inconsistent with the constitutional grant of federal admiralty jurisdiction. The plaintiffs argued, first, that the arbitration procedure attempted to create a new state remedy, invalid because the Judiciary Act of 1789 allows states to enforce only maritime remedies known at common law. The court, however, reasoned that the arbitration panel would award lump sum damages, a typical common law remedy, and thus Maine courts could concurrently exercise jurisdiction with federal district courts sitting in admiralty. Second, the plaintiffs argued that the vicarious liability rule was an invalid attempt to create "novel" rules of substantive admiralty law or rules conflicting with existing admiralty law, and thus the need for uniform federal rules was frustrated. The court, relying on the *Askew* holding that a statute violates the admiralty clause only if it contravenes a specific act of Congress, prejudices the characteristic features of maritime law, or interferes with its proper harmony and uniformity with respect to interstate and international relations, declared that plaintiffs "cited no *national* interest which would be affected by the imposition upon oil terminals of vicarious liability."[203] The court concluded that the state statute was not inconsistent with the admiralty clause. In finding that the Act did not conflict with a specific federal statute, the Maine supreme court read *Askew* for the proposition that under section 311 of the FWPCA, a state may not only impose liability where not imposed by federal law, but may also impose unlimited liability for discharges that injure its interests. Whether this reading of *Askew* is correct remains doubtful,[204] although it is of some significance that the Supreme Court dismissed the appeal of the *Portland* case for want of a substantial federal question.[205] *Askew* also left unanswered the question of whether the Limitation of Liability Act of 1851, which has been held to apply to shore damages,[206] applies to state post-discharge recovery legislation governing vessels. The terminal operators in *Portland* argued that because the Maine Act did not limit the liability of vessels, it was invalid. The state wisely conceded that any action against vessels would be governed by the federal statute, however, and the court construed the statute to avoid constitutional infirmities: there was no con-

203. 307 A.2d at 44.
204. *See* text accompanying notes 174-75 *supra*.
205. 414 U.S. 1035 (1973).
206. Petition of New Jersey Barging Corp., 168 F. Supp. 928 (S.D.N.Y. 1958).

flict because the Act "*by its terms*, does not provide for unlimited liability . . . ."[207]

4. *Express Federal Preemption*

State post-discharge cost recovery legislation may be expressly preempted in the future if Congress ratifies the IMCO Fund Convention and passes supplementing "superfund" legislation.[208] The Senate has not yet ratified the convention, but the Ford Administration and Senator Magnuson have introduced legislation to create a domestic fund to supplement the IMCO Convention. Both bills impose strict liability (subject to slightly different exceptions) on vessels and shore facilities. The Administration bill,[209] limits liability to $150 per ton or $20,000,000 for vessels and $50,000,000 for on- and offshore facilities;[210] Senator Magnuson's bill,[211] contains the same limitations except that it increases the liability limitation to $100,000,000 for deep water ports.[212] These liability limits are in addition to the limits of the IMCO Civil Liability Convention and would apply to ships in United States territorial waters. To supplement the liability limitations, both bills create a fund fed by a per-barrel tax on oil transferred from ship to shore. The major differences between the two bills are: (1) under the Administration bill, state laws are preempted,[213] while state liability schemes are not preempted under the Magnuson bill;[214] and (2) under the Administration bill, the injured party must first sue the party responsible for the spill before applying to the fund for compensation.[215] The Magnuson bill allows the injured party to approach the fund directly; to avoid double recoveries, claimants are precluded from receiving compensation for the same damages from both sources.[216]

---

207. 307 A.2d at 45.

208. For discussions of pending legislation, see Wood, *Requiring Polluters to Pay for Aquatic Resources Destroyed by Oil Pollution*, 8 NAT. RES. LAW. 545, 567-68 (1975); Wood, *An Integrated International and Domestic Approach to Civil Liability for Vessel-Source Pollution*, 7 J. MARITIME L. & COM. 1 (1975). *See also* Goldie, *Liability For Oil Pollution Disasters: International Law and the Delimitation of Competence in a Federal Policy*, 6 J. MARITIME L. & COM. 303 (1975).

209. S. 2162, 94th Cong., 1st Sess. (1975).

210. *Id.* § 105(a).

211. S. 1754, 94th Cong., 1st Sess. (1975).

212. *Id.* § 3(b).

213. S. 2162, 94th Cong., 1st Sess. § 114 (1975).

214. S. 1754, 94th Cong., 1st Sess. § 10(a) (1975).

215. S. 2162, 94th Cong., 1st Sess. § 110(b) (1975).

216. S. 1754, 94th Cong., 1st Sess. § 10(b) (1975).

E. STATE POWER TO DENY PORT ACCESS TO VESSELS

Kantian notions of moral imperatives are popular among environmentalists,[217] and in the name of such imperatives states may now be subjected to political pressure to avoid the risks of oil and hazardous substances pollution by barring ships carrying those cargoes from Lake Superior. Article I of the Boundary Water Treaty between Canada and the United States[218] guarantees to ships of the two countries the right to use Lake Superior for navigation.[219] If navigation is construed not to include access to a United States port, however, a state might have the option to deny port access to all vessels carrying oil and hazardous substances.[220] While the issue may be largely hypothetical, since the need for economic development in the Upper Midwest makes it unlikely that any of the lake states would take such a drastic step, it is nonetheless relevant to the general question of spill prevention strategy.

Clearly the most effective way to prevent oil and other hazardous substances spills is for the states which own the bed of the lake to prohibit tankers from using it. A state's power to conserve its resources is, however, circumscribed by the power

---

217. *See* Olpin, *Policing Toxic Chemicals*, 1976 UTAH L. REV. 85, 94.

218. Treaty with Great Britain Relating to Boundary Waters Between the United States and Canada, 36 Stat. 2448 (1909), T.S. No. 548 (effective May 13, 1908).

219. Article I of the treaty provides:

> The High Contracting Parties agree that the navigation of all navigable boundary waters shall forever continue free and open for the purpose of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally, subject, however, to any laws and regulations of either country, within its own territory, not inconsistent with such privilege of free navigation and applying equally and without discrimination to the inhabitants, ships, vessels, and boats of both countries.

220. The legislative history of the Boundary Waters Treaty provides little insight into the question of whether freedom of navigation includes the right of port access; the treaty drafters were primarily concerned with the problem of water diversion and lake level regulation. *See generally* L. BLOOMFIELD & G. FITZGERALD, BOUNDARY WATER PROBLEMS OF CANADA AND THE UNITED STATES (1958); Griffin, *A History of the Canadian-United States Boundary Waters Treaty of* 1909, 37 U. DET. L.J. 76 (1959). Based on the purpose of the treaty and the language of article I, the most persuasive argument is that the treaty does not include a right of access to Canadian or United States ports. Most probably the treaty incorporates the customary international law concept of freedom of navigation, which is limited to the right of innocent passage through a nation's territorial waters. *See* note 10 *supra*. Boundary waters are defined as waters from main shore to main shore of the lake; this definition reinforces the argument that the right of navigation does not include port access.

of the federal government to regulate interstate and foreign commerce in the interest of free trade.[221] Both the states and the federal government have important interests at stake in the area of resource conservation; in order that those interests be accommodated, states cannot have complete discretion to control access and use in the name of environmental quality.

In order to determine the proper scope of state authority to deny access to its ports, it is first necessary to distinguish between federal preemption of state regulation and the invalidity of state statutes under the "dormant" powers of the commerce clause.[222] Clearly, Congress may pass a law or ratify a treaty expressly authorizing tanker use of a lake.[223] It is also possible for the Court to conclude that the right to use the lake is implied in the federal scheme of navigation regulation. State regulation would be barred by federal preemption in both cases. Once the Court decides that the state law is inconsistent with a federal law or statutory policy enacted pursuant to a granted power, the supremacy clause dictates that state law must yield.[224] A recent decision by a Washington three judge federal court illustrates this principle. A Washington statute prohibited tankers of over 125,000 dwt from entering Puget Sound and prohibited tankers between 40,000 and 125,000 dwt from entering unless they were built with double bottoms, twin screws, and radar.[225] Although limited exceptions were allowed,[226] the prohibitions effectively precluded any supertanker from entering the Sound. On September 24, 1976 a three judge panel held that the statute was preempted by the federal Ports and Waterways Safety Act

---

221. *See* U.S. CONST. art. I, § 8.

222. *See generally* Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1 (1824). Professor Gunther has written that for this limitation "the Court has not drawn an [*sic*] any overt restraint on state power, but rather on the grant of power to Congress in Art. I, § 8, to regulate interstate commerce. Into that affirmative grant of power the court has read self-executing limits on state legislation when Congress has not acted." G. GUNTHER, CONSTITUTIONAL LAW 279 (9th ed. 1975). The most cogent rationale for the assertion of this power is presented in Mr. Justice Jackson's opinion in H.P. Hood & Sons v. DuMond, 336 U.S. 525, 534-35, 537-39 (1949).

223. United States v. Curtiss-Wright Export Corp., 299 U.S. 304, 315-16 (1936). *See* G. GUNTHER, *supra* note 222, at 357.

224. *See* Florida Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132, 141 (1963).

225. 1975 WASH. LAWS ch. 125, § 3(2) (1st Extraordinary Sess., May 29, 1975).

226. Tankers in ballast or escorted by tugs with an aggregate horse power to five percent of the dwt of the tanker are allowed to enter the Sound. *Id.*

of 1972[227] under which the Coast Guard had already promulgated tanker design regulations that did not require double bottoms.[228]

The Court's power to invalidate state legislation under the commerce clause goes beyond preemption. States may validly regulate commerce, since federal power in that area is not exclusive.[229] State laws may nevertheless be invalid even where there is no federal law or statutory policy directly applicable, if the law burdens interstate or foreign commerce. Whether a state law burdens interstate or foreign commerce is determined by the Court's taking evidence and balancing the state's interest against the burden on commerce.[230]

Beyond these well established principles, generalizations about the allocation of regulatory authority between the states and the federal government are hazardous. One can nonetheless start with the observation that the Court recognizes the need to accommodate legitimate state interests with assertions of federal authority. In *Willson v. The Black Bird Creek Marsh Co.*,[231] the Supreme Court found no conflict between the commerce clause and the state's action in damming a "small" navigable creek for health reasons, despite the allegation that federally licensed ships would be prevented from plying the creek. Thus a starting point in analyzing the scope of state regulatory author-

227. Atlantic Richfield Co. v. Evans, No. C 75-648M, (W.D. Wash. Sept. 1976).

228. *See* notes 80-82 *supra* and accompanying text.

229. Cooley v. Board of Wardens, 53 U.S. (12 How.) 299, 316 (1851).

230. Southern Pac. Co. v. Arizona, 325 U.S. 761, 768-69 (1945). *Southern Pacific* still seems to represent the Supreme Court's approach to "dormant" commerce clause problems. In Pike v. Bruce Church, Inc., 397 U.S. 137 (1970), Justice Stewart writing for a unanimous Court struck down an Arizona law requiring cantaloupe grown in the state to be packed and shipped in the state in order to protect and enhance the reputation of growers within the state. Although Justice Stewart noted that "[o]ccasionally the Court has candidly undertaken a balancing approach in resolving these issues . . . but more frequently it has spoken in terms of 'direct' and 'indirect' effects and burdens," *id.* at 142, he proceeded to balance the state's interest against the impact on the plaintiff. Both parties stipulated that the cantaloupes, which were packed across the Colorado river in California, were of exceptionally high quality, and Justice Stewart found that the state's legitimate interest in product reputation did not justify the construction of a $200,000 packing plant 31 miles from plaintiff's existing plant. He also suggested that state statutes requiring business operations to be performed in a home state that could be more efficiently performed elsewhere are "virtually *per se* illegal." *Id.* at 145.

231. 27 U.S. (2 Pet.) 245 (1829).

ity is to identify the relevant state interests; littoral states unquestionably have a high interest in protecting the quality of Lake Superior.

The weight accorded a state's interest in protecting the public is illustrated by the modern standard for evaluating local health regulations alleged to be unconstitutional. Unless "the total effect of a law as a safety measure . . . is so slight or problematical as not to outweigh the national interest in keeping interstate commerce free from interferences which seriously impede it," the statute will be upheld.[232] The Court's standard of review, however, is in fact more penetrating than this language suggests. Under this standard two types of legislation, closely analogous to a prohibition on all tanker use of a lake, have been invalidated as inconsistent with the commerce clause policy of free trade.

First, the Court has invalidated state legislation that attempts to allocate natural resources to the use of state citizens in preference to citizens of other states. In invalidating a statute which required all local demand for natural gas to be met before gas could be exported, the Court expressed the concern that:

> If the States have such power a singular situation might result. Pennsylvania might keep its coal, the Northwest its timber, the mining States their minerals. And why may not the products of the field be brought within the principle? Thus enlarged, or without that enlargement, its influence on interstate commerce need not be pointed out. To what consequences does such power tend? If one State has it, all States have it; embargo may be retaliated by embargo, and commerce will be halted at state lines. And yet we have said that "in matters of foreign and interstate commerce there are no state lines." In such commerce, instead of the States, a new power appears and a new welfare, a welfare which transcends that of any State. But rather let us say it is constituted of the welfare of all of the States and that of each State is made the greater by a division of its resources, natural and created, with every other State, and those of every other State with it.[233]

---

232. Southern Pac. Co. v. Arizona, 325 U.S. 761, 775-76 (1944).

233. Pennsylvania v. West Virginia, 262 U.S. 553, 599-600 (1923), *quoting from* West v. Kansas Natural Gas Co., 221 U.S. 229, 255 (1911). *Pennsylvania v. West Virginia* and the other cases analyzed in this section were reaffirmed by the court during the last term. Hughes v. Alexandria Scrap Corp., 96 S. Ct. 2488 (1976). To reduce the number of abandoned automobiles within the state, Maryland paid a bounty to any processor who destroyed an automobile eight years or older. In 1974 the law was changed to require greater title documentation from out- as compared to in-state processors. A Virginia processor challenged the amendments as a burden on interstate commerce. In rejecting the commerce clause argument, Justice Powell wrote: "The common thread of all these cases is that the State interfered with the natural functioning of the interstate market either through prohibition or through burden-

Second, where a state has available a less restrictive alternative, the Court may also invalidate the state legislation. This was the standard adopted in *Dean Milk Co. v. Madison*,[234] where the Court struck down a Wisconsin ordinance regulating milk pasteurization, stating that "even in the exercise of its unquestioned power to protect the health and safety of its people" the state must use whatever reasonable and adequate alternatives are available to meet its ends.[235]

Applying these two principles to hypothetical state attempts to prohibit the transportation of oil and other hazardous substances on Lake Superior, I conclude that such a statute would be unconstitutional. A state's attempt to restrict use of Lake Superior to those activities deemed consistent with ecological imperatives is a more serious interference with interstate and foreign commerce than a state's attempt to give its citizens a preference in the allocation of natural resources. *Someone* will consume the natural resources and one could argue, as Justice Holmes did in *Pennsylvania v. West Virginia*,[236] that it might as well be the people close to their source. Navigable waterways, on the other hand, have historically been arteries of commerce and a means of binding states and nations together. Closing an artery to an important class of trade would undermine the primary purpose of the commerce clause.[237] Although national policy with regard to water use has evolved to include uses other than enhancing navigation, free trade remains important. Recent state and federal pollution control legislation should be construed to reflect only a national policy that traditional uses should be undertaken in a manner consonant with the preservation of environmental quality. Consistent with this national policy, the states may enact post-spill recovery legislation;[238] but in light of the continuing need for trade, this option

---

some regulation. By contrast, Maryland has not sought to prohibit the flow of hulks, nor to regulate the conditions under which it may occur." 96 S. Ct. at 2496. Justice Powell also noted that "nothing in the purposes animating the Commerce Clause forbids a State, in the absence of congressional action, from participating in the market and exercising the right to favor its own citizens . . . ." *Id.* at 2497. Although the case sustains a state environmental law, *Hughes* thus offers no support for the proposition that a state can close its waters to tankers.

234. 340 U.S. 349 (1951).
235. *Id.* at 354.
236. 262 U.S. 553, 602-03 (1923) (dissenting opinion).
237. *See* Bibb v. Navajo Freight Lines, 359 U.S. 520, 529-30 (1959).
238. 33 U.S.C. § 1160(b) (1970).

may well be the limit of state power. In short, a less restrictive alternative than denial of access is available.

Despite this analysis, it could be argued that a court need not balance interests in the context of environmental protection because the interest in the environment is so powerful that it outweighs any conceivable burden on commerce. This argument can be bolstered by the fact that the Supreme Court's overriding concern in the commerce clause cases has been the prevention of state discrimination against nonresidents.[239] State legislation that applies to residents and nonresidents alike poses a lesser threat to commerce clause policies and greater weight can be given to the interests that a state has identified as pressing. Lack of discrimination against nonresidents was a major factor in the decision of an Oregon intermediate appellate court upholding a state environmental law which required all soft drinks and beer to be sold in returnable containers.[240] The court did not engage in the usual balancing of federal and state interests. The Supreme Court, however, has always employed a balancing test where interstate transportation is involved[241] because at issue in commerce clause cases is whether a particular problem demands a uniform solution; where Congress fails to indicate a preference, this function falls to the courts. Thus the Oregon decision should probably not be read to stand for the proposition that a court need not attempt to balance competing needs where envi-

239. *See* Soper, *The Constitutional Framework of Environmental Law*, in FEDERAL ENVIRONMENTAL LAW 20, 94 (E. Dolgin & T. Guilbert ed. 1974). "New" states' rights advocates can find support in State v. Bundrant, 546 P.2d 530 (Alas. 1976). The Alaska supreme court upheld an emergency state regulation declaring certain areas within and without the territorial waters of the state closed to king crab fishermen. A "dormant" commerce clause argument was rejected on the grounds that: (1) any argument that the regulation caused interference with United States foreign relations policies or treaties was speculative because the regulations would not be enforced against foreign nationals, *see* Zschernig v. Miller, 389 U.S. 429 (1968); (2) national regulations were not "truly necessary" since the Department of Commerce had concluded in 1974 that a uniform approach to fisheries regulation would be inadvisable and self-defeating; (3) the regulations were not discriminatory against non-Alaskans as they applied equally to both intrastate and interstate fishing boats; and (4) "there is no reason to think that exercise of this jurisdiction in a *patently neutral* fashion will provoke retaliatory restrictions by Alaska's sister states." 546 P.2d at 540 (emphasis added).

240. American Can Co. v. Oregon Liquor Control Comm., 15 Ore. App. 618, 517 P.2d 691 (Ct. App. 1973). The case has rightly been criticized for the court's failure to employ a balancing analysis. *See* Comment, *State Environmental Protection Legislation and the Commerce Clause*, 87 HARV. L. REV. 1762, 1778 (1974).

241. *See* Southern Pac. Co. v. Arizona, 325 U.S. 761 (1945).

ronmental matters are involved. A more sound interpretation of the decision is that when "the effect of state regulation is merely to force nonresident industries to internalize what would otherwise be externalities imposed by those industries on state residents"[242] the statute is not an unreasonable burden on interstate commerce. This reading of the Oregon decision is consistent with the results in *Askew* and *Portland Pipeline*, but the reasoning would not support prohibitions on shipping or the denial of port access. Implicit in all three cases is the principle that a state's definition of desired standards of environmental quality is consistent with the policies of the commerce clause only so long as commerce remains open to all who can meet reasonable state standards.

In some instances, however, a reasonable state environmental standard could encompass a prohibition on the use of a state's resources. Such a prohibition would be consistent with the commerce clause only if the burden on interstate commerce were slight. The decision in *Hackensack Meadowlands Committee v. Municipal Authority*,[243] a recent New Jersey case now pending before the Supreme Court, illustrates one form of state resource use prohibition which has only a slight impact on interstate commerce. To prolong the life of its landfills, New Jersey banned all out-of-state solid wastes except those used to manufacture fuel. Applying the Supreme Court's balancing test, the Supreme Court of New Jersey held that this legislation was not preempted by any federal legislation and did not violate the dormant commerce clause power of the federal government. Quoting Justice Holmes's language in *Georgia v. Tennessee Copper*,[244] the New Jersey court found that prolonging the useful life of a landfill site was a legitimate state interest and that the legislation's purpose was to protect "vital resources of New Jersey, not to impose economic barriers or create commercial restrictions."[245] The burdens on interstate commerce were found to be slight since the exporting states of New York and Pennsylvania had methods (albeit more costly than shipping their garbage to the Garden State) of disposing of their wastes. *Pennsylvania v. West Virginia*[246] was distinguished on the ground that there the state was

242. Comment, *supra* note 240, at 1782.

243. 348 A.2d 505, 68 N.J. 451 (1975), *prob. juris. noted* Philadelphia v. New Jersey, 96 S. Ct. 1504 (1976).

244. 206 U.S. 230 (1907).

245. 68 N.J. at 475; 348 A.2d at 517.

246. 262 U.S. 553 (1923). *See* text accompanying note 233 *supra*.

trying to preserve a resource for "selfish economic and commercial gain" whereas in *Hackensack Meadowlands*, New Jersey sought to protect the health of its citizens. This distinction is not as "clear" and "basic" as the New Jersey court suggests, however, and in fact, it appears untenable. There is no essential difference between a state's interest in protecting its citizens from disease and its fragile resources, such as wetlands, from being filled, and the state's interest in insuring that its citizens have adequate fuel for industry and home use. *Hackensack Meadowlands* does, nonetheless, indicate that a state's interest in environmental quality should be honored if all that is required by the legislation is that other states dispose of their own wastes. Clearly, a state need not be a sink for surrounding states. Despite the special regard for a state's environmental concerns evident in the *Hackensack Meadowlands* decision, however, the rationale cannot be stretched to cover littoral states' denial of use of their waters or ports, because the requirement that the burden on commerce be slight simply could not be met.[247]

F. Use of State Land Use Laws to Prevent Spills by Controlling Port Location

State and local land use controls designed to limit the use of coastal waters for commodity transportation, by controlling the location of oil storage facilities, for example, are an alternative spill prevention strategy open to the states. If any new controls are implemented, they will be undertaken within the framework of the Coastal Zone Management Act of 1974 (CZMA),[248] which provides federal planning and operating money to coastal states (including those bordering the Great Lakes) voluntarily adopting a coastal zone management program. If a state declines to participate in the program, the federal government may not compel it to do so. A state which chooses to participate cedes no direct regulatory authority to the federal government.[249] If a state

247. Although questions similar to those posed by the Oregon and New Jersey cases recently were raised in an action challenging the Washington statute that required, *inter alia*, double bottoms on supertankers between 40,000 and 125,000 dwt entering Puget Sound, *see* notes 225-28 *supra* and accompanying text, the federal district court held only that the state statute was preempted by the Ports and Waterways Safety Act of 1972 and did not reach the dormant commerce clause or interference with foreign affairs issues. Atlantic Richfield Co. v. Evans, No. C 75-648M (W.D. Wash. Sept. 1976).

248. 16 U.S.C. §§ 1451-64 (Supp. V 1975).

249. *Id.* § 1456(e)(1). The preservation of the role of local governments in coastal zone planning and regulation is a consistent theme in the legislative history of the Act. *See* Mandelker & Sherry, *The Coastal*

program fails to meet statutory standards, the government's only remedy is to withhold funds.[250] This scheme of indirect federal control is designed to leave state governments free to develop a structure of shared local and state regulatory authority which balances demands for growth against environmental protection. Environmentalists have also pointed out that it was the hope of some of the sponsors of the legislation that states would adopt programs that would channel growth away from coastal areas.[251]

Despite the judicious refusal of Congress to impose a single regulatory program on the states, the CZMA has a potentially significant impact on the realignment of local and state regulatory authority. Historically, local governments have had the primary responsibility for regulating coastal development; state governments intervened only to acquire land for public purposes and to improve navigation. The CZMA, in the words of a prominent coastal scholar, attempts to encourage the states "to reclaim the predominant decision-making role."[252] When growth occurs the Act encourages (but does not require) states to adopt policies that distinguish between water-related and non-water-related uses, and to prefer the former. In short, the CZMA gives financial incentive and support for a state decision to implement the public trust over its waters and associated shoreland by opting for environmental quality maintenance in the coastal zone.

States are now experimenting with three new land use control techniques relevant to coastal zone development: (1) designation of "critical areas," either because the area contains environmentally sensitive resources, or is marked for rapid development, or both;[253] (2) energy and industrial facility siting

---

Zone Management Act of 1972, 7 URBAN L. ANN. 119, 121-127 (1974). *See also* Brewer, *The Concept of State and Local Relations Under the CZMA*, 16 WM. & MARY L. REV. 717 (1975).

250. 16 U.S.C. § 1458(b) (Supp. V 1975).

251. After a study of the legislative history Mandelker and Sherry conclude: "The CZMA . . . came as a response to pressures for legislative action from those primarily concerned with coastal preservation and enhancement." Mandelker & Sherry, *supra* note 249, at 136. *See generally* Cameron, *NEPA and the CZMA: The Environmental Impact Statement and Section 306 Guidelines*, 16 WM. & MARY L. REV. 773 (1975).

252. Power, *The Federal Role in Coastal Development*, in FEDERAL ENVIRONMENTAL LAW 792, 833 (E. Doglin & T. Guilbert ed. 1975).

253. The most comprehensive statute allowing the designation of critical areas is the Florida Environmental Land Water Management Act, FLA. STAT. ANN. § 380.05(2)(c) (Supp. 1974). *See* Finnel, *Saving Paradise: The Florida Environmental Land Water Management Act of 1972*,

review;[254] and (3) state standards for review of local land use planning in the coastal zone.[255] Each of these techniques involves some shift of regulatory authority from local to state governments, but none involves state preemption. Around Lake Superior, Minnesota has adopted a power plant siting statute,[256] and Michigan, Minnesota, and Wisconsin have been pioneers in implementing the critical areas approach through the passage of inland wetlands protection legislation.[257] States such as Florida and Vermont have adopted statutory programs to oversee shoreline development.[258] California and Washington have adopted the most comprehensive coastal zone management programs involving a combination of regional planning and administrative

---

1973 URBAN L. ANN. 103. For a good review of the concept of critical areas designation, see Mandelker, *Critical Area Controls: A New Dimension in American Land Development Regulation*, 41 A.I.P. 21 (1975).

254. For a review of recent legislation, see Van Baalen, *Industrial Siting Legislation: The Wyoming Industrial Development Information and Siting Act—Advance or Retreat?*, 11 LAND & WATER L. REV. 27 (1976).

255. *See, e.g.*, California Coastal Conservation Act of 1972, CAL. CODE ANN., PUB. RES. § 27000 *et seq.* (1972); Washington Shoreline Management Act of 1971, REV. CODE WASH. 90.58.10 *et seq.* (Supp. 1975). See COUNCIL ON ENVIRONMENTAL QUALITY, FIFTH ANNUAL REPORT 49-92 (1974), for a review of recent coastal protection and related legislation.

256. MINN. STAT. §§ 166C.51-.69 (1974).

257. MICH. CORP. LAWS §§ 281.631-.642 (Supp. 1972); MINN. STAT. § 105.485 (1974); WIS. STAT. ANN. § 59.971 (West Supp. 1976). *See generally* Ausness, *Land Use Controls in Coastal Areas*, 9 CAL. WESTERN L. REV. 391 (1973).

258. Florida's coastal zone management program designates preservation areas, conservation areas, and development areas. Development in areas designated for this purpose is somewhat constrained by the policy that priority is given to water-related uses such as ports and water-related industry, utilities that must have waterfront location, and water-related commercial uses such as marinas. Further, in addition to the water-relatedness criteria, enhancement of aesthetics is a primary consideration in location decisions concerning commercial shoreline uses. *See* Coastal Zone Summary Sheets, Florida Coastal Coordinating Council Recommendation For Development Activities in Florida's Coastal Zone, *reprinted in Deep Water Ports Act of 1973, Hearings on S. 1971 and S. 2232 before the Joint Subcomm. on Deepwater Ports Legislation of Senate Comm. on Commerce, Interior and Insular Affairs, and Public Works*, 93rd Cong., 1st Sess., at 1344 (1973).

VERMONT STAT. ANN. tit. 10, § 1421 *et seq.* (1973), *as amended*, § 1422 *et seq.* (Supp. 1976), provides for a comprehensive state water resources use plan, and for state planning and coordination of local shoreline protection bylaws. "The primary purpose of the plan shall be for the preventive control of pollution, giving due consideration to necessary development and growth." *Id.* § 1423(b) (Supp. 1976). The statute sets planning standards that favor domestic, nonpolluting, and recreational uses of the state's shorelines and waterways.

review of specific development decisions,[259] and Maine and Wyoming have adopted innovative industrial siting legislation.[260] Thus, a wide variety of techniques are open to states wishing to control coastal development. However, any new land controls adopted with respect to the Lake Superior shoreline should be adopted primarily for purposes other than spill prevention. The Duluth-Superior region is economically depressed and there are no substantial pressures for intensive shoreline development.[261] The twelve Lake Superior ports are adequate to handle the most optimistic projected increases in cargoes and therefore land use controls will have only a peripheral impact on the use of the lake for shipping.

If a state chooses to preserve the purity of its offshore waters by adopting a coastal zone development plan which prohibits oil refinery and storage facilities, does the CZMA contain any constraints? It has been argued that the federal government probably cannot disapprove a program that fails to provide for state regulation of energy siting facilities because "the Act lacks action-forcing language."[262] Further, section 307 requires federal agencies to insure that "to the maximum extent practicable" their activities are consistent with state management programs.[263] This section provides a mechanism by which states can force a federal agency to deny a grant of funds, or more importantly, to withhold a permit, such as a Corps of Engineers dredge and fill permit. Thus, a state can probably withdraw a coastal area from development to prevent serious environmental degradation as well as prevent the expansion of already crowded facilities.[264] Although the federal government cannot preempt

259. CAL. CODE ANN., PUB. RES. § 27000 *et seq.* (West Supp. 1976); WASH. REV. CODE ANN. § 43.51.650 *et seq.* (1970).

260. *See* ME. REV. STAT. tit. 38, § 481 *et seq.* (Supp. 1976); WYOMING STAT. §§ 35-502.75-.94 (Supp. 1975).

261. Draft Environmental Impact Statement, *supra* note 21, at 34.

262. Whitney, *Siting of Energy Facilities in the Coastal Zone: A Critical Regulatory Hiatus*, 16 WM. & MARY L. REV. 805, 815 (1975).

263. 16 U.S.C. § 1456(c)(1), (2) (Supp. V 1975). For a good analysis of the potential authority this section grants to the states, see Rubin, *The Role of Coastal Zone Management Act of 1972 in the Development of Oil and Gas from Outer Continental Shelf*, 8 NAT. RES. LAW. 399 (1975).

264. The Deep Water Ports Act of 1974 is not applicable to the Great Lakes. The Act allows states to veto the location of a port off its shores, thus indicating the deference that Congress is likely to show to state coastal zone decisions. 33 U.S.C. §§ 1501-1524 (Supp. V 1975). *See generally Deepwater Port Act of 1973, Hearings Before the Special Joint Subcomm. on Deepwater Ports Legislation of the Senate Comm. on*

a state land use decision which has the effect of outlawing refining and storage facilities, the Act does leave the federal government some power to prevent exclusionary coastal zone policies[265] through the fund disbursement provisions.

Federal funds under the Act are disbursed in two stages: planning grants are followed by grants to implement a federally approved management program. The criteria for approval seem primarily intended to give the federal government some leverage with which to induce state governments to take a more active role in local decisionmaking on matters affecting environmental quality.[266] Section 306(8), however, provides that before approval of a program, the Secretary of Commerce must find that "[t]he management program provides for adequate consideration of the national interest involved in the siting of facilities necessary to meet requirements which are other than local in nature."[267] Congress was seeking by this provision to prevent

---

Commerce, Interior and Insular Affairs, and Public Works, 93d Cong., 1st Sess., pts. I & II (1973); Meltz, *The Deep Water Ports Act of 1974: Half Speed Ahead*, 5 ENVIR. L. REP. 50043 (Envir. L. Inst. 1975). For a case study of a local community's successful attempt to ban a refinery from a coastal site, see Deal, *The Durham Controversy: Energy Facility Siting and the Land Use Planning and Control Process*, 8 NAT. RES. LAW. 437 (1975).

265. *See* Hershman, *Achieving Federal-State Coordination in Coastal Resources Management*, 16 WM. & MARY L. REV. 747 (1975).

266. 16 U.S.C. § 1455(c) (Supp. V 1975) directs the Secretary of Commerce to make certain findings before approving a state's coastal management program, including findings that the state has coordinated its program with local and regional plans, and that an effective mechanism for continuing cooperation and coordination with local units of government has been set up. Section 1455(d) requires, further, that the Secretary find that the state have the power to implement its management plan, through purchase and condemnation of interests in land and water and the administration of land and water use regulations. The Act thus conditions grants of federal money on local participation coupled with state coordination and state power to put the plan into effect.

267. 16 U.S.C. § 1455(c)(8) (Supp. V 1975). The Coastal Zone Management Act Amendments of 1976, Act of July 26, 1976, Pub. L. No. 94-370, 94 Stat. 370, signed by President Ford on July 26, 1976, strengthens the powers of the states to veto federally licensed activities but also increases the leverage of the federal government. In addition to preserving a state veto of federally licensed projects, the federal government will provide impact assistance to states whose shores are subjected to the pressure of rapid development due to the exploitation of the outer continental shelf. *Current Developments*, 7 ENVIR. REP. 537 (July 30, 1976).

In support of its supertanker ban in Puget Sound, the State of Washington argued that the Commerce Department's approval of its coastal management plan "somehow waives federal preemption in the area." Atlantic Richfield Co. v. Evans, No. C 75-648M at 5-6 (W.D. Wash. Sept. 1976). In rejecting the argument, the court noted that the Secre-

other states from following the lead of Delaware, which banned heavy industry from its coastlines.[268]

Section 306(8) is an incomplete reaction to the problem, however, for it fails to define with any precision the federal government's response to a state exclusionary policy. The most that can be said is that a state which participates in a coastal zone management program cannot ignore the consequences of an exclusionary land use policy. Considerable federal jawboning to induce a state to permit use of its waters for transportation and reception of oil and other hazardous commodities might reasonably be expected.

CONCLUSION

The purpose of this Article has been to explicate the complicated legal context in which decisions about a spill strategy for Lake Superior will be made. Because control of oil spill pollution inevitably affects international shipping, international agreements and federal law provide basic reference points necessary for assessment of the state role in controlling marine pollution. While state power to impose liability and provide for damage recovery has not been preempted completely by international and national law, it is safe to say that state authority is most circumscribed when it impinges directly on regulation of international shipping. Thus, the tanker design regulations adopted by the 1973 IMCO Convention and by the United States Coast Guard will preclude any state from requiring inconsistent standards for tankers entering waters under that state's jurisdiction. Similarly, state attempts to deny oil tankers access to ports or, in the case of the littoral states, use of the lake itself, would almost certainly be invalidated as inconsistent with the commerce power and as an interference with foreign trade. The fate of state-level damage compensation funds in light of the IMCO Fund Convention and pending federal legislation, on the other hand, is undecided. Based on the proposals now before Congress, such funds could

---

tary can only approve a state plan if "the views of Federal agencies principally affected by such program have been adequately considered," 16 U.S.C. § 1456 (b) (1970), and concluded "[t]he Secretary may or may not have noticed the preemptive effect of the PWSA on Washington's Tanker Law. That is not before us. We cannot read the Secretary's approval of a coastal zone management plan, to which the Tanker Law is only collaterally related, as foreclosing our inquiry into the federal preemption of oil tanker regulation." Atlantic Richfied Co. v. Evans, *supra*.

268. DEL. CODE ANN. tit. 7, §§ 7001-014 (1974).

either join tanker design regulations in the preempted category or continue to exist as an alternative source of recovery for spill victims; even if the federal fund law eventually enacted allows complementary state statutes, the volume of oil-transporting traffic on Lake Superior is presently too small to justify creation of such a fund.

Except for these limitations relating to international trade, however, states may seek to effect a plan of oil pollution prevention through a variety of methods. They may, for example, follow the lead of international bodies and the federal government and impose strict liability for harmful discharges. Because the FWPCA is concerned primarily with cleanup, states may also go further and provide recovery for interests such as property damage and economic loss, which are not covered by the present federal law. They may ensure standing for individual claimants by eliminating the distinction between general and special damages for plaintiffs who suffer an injury which is peculiar to the individual but nonetheless not recognized by the common law. Nonstatutory remedies, such as a common law action by the state as *parens patriae* to recover for harm to fish and wildlife, are also available to fill the gaps in the federal recovery scheme.

The ability of states under the CZMA to deny use of the shoreline for ports or storage facilities is as yet untested. Although technically the statute does not preclude a state from incorporating such strict land use regulations as part of a pollution control program, federal power to withhold money from states with disapproved plans may make such a scheme economically impractical. For purposes of designing a spill control strategy for Lake Superior, many of these questions relating to state power may be only academic. Since there is presently no pressure for shoreline development, issues under the CZMA are not likely to arise.

Because the three littoral states of Lake Superior do not face the same threat of catastrophic spills as coastal states such as Florida and Maine, an adequate spill strategy for Lake Superior may be fashioned from general water pollution[269] and land use

269. The FWPCA directs that all point source dischargers use the "best available technology" by 1983, 33 U.S.C. § 1311(b)(2)(A) (Supp. V 1975), and the states are free to supplement this effluent standard with higher receiving water quality standards. *Id.* § 1311(b)(1)(C). The littoral states have responded enthusiastically to this invitation and now are in the process of implementing a non-degradation policy for Lake Superior. This is illustrated by Minnesota's, Michigan's and Wisconsin's

programs. The states may decide that the lake should be dedicated to the maintenance and enhancement of environmental quality, and thus adopt a non-degradation policy pursuant to their trusteeship of the lake's beds and waters. Consistent with this aim, carefully considered legislation which supplements existing damage recovery rules to provide coverage for the property damage and economic losses suffered by private and public shoreland owners would be the most beneficial innovation.

---

aggressive efforts to halt Reserve Mining's discharge of taconite tailings into the lake. *See* Reserve Mining Corp. v. United States, 514 F.2d 492 (8th Cir. 1975).